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I. *Remarks on Book* II. *Chapter 2 of the Vishnu Purana.*

It is natural to suppose that the literary and scientific works of Hindustan contain much information of an indirect character regarding the most important epochs of Hindu advancement; and it is a matter for congratulation that, both in Germany and Great Britain, strenuous efforts are being made to throw open the stores of Sanscrit learning to individuals unacquainted with that language. Owing to Professor Wilson's labours, the Vishnu Purana is no longer a sealed book to the mere European scholar; and, in the perusal of his Translation we were led to examine a little closely the Second Book, which treats especially of Geography and Astronomy. The names of the principal features and divisions of India do not in general enable us to recognise them, but it cannot be doubted that a careful examination of the geographical chapters would throw much light on the ancient geography of India. Our object in the present paper is not, however, connected with these chapters but with the eighth,

which, amid certain astronomical details, affords a clue to the latitude of the writer, a point, as it seems to us, of no little interest.

The following is an extract from the eighth chapter.

"As the circumference of a potter's wheel revolves most rapidly, so the sun travels rapidly on his southern journey: he flies along his path with the velocity of wind, and traverses a great distance in a short time. In twelve muhurttas he passes through thirteen lunar asterisms and a half during the day; and during the night he passes through the same distance only in eighteen muhurttas. As the centre of the potter's wheel revolves more slowly than the circumference, so the sun in his northern path again revolves with less rapidity and moves over a less space of the earth in a longer time, until, at the end of his northern route, the day is again eighteen muhurttas, and the night twelve; the sun passing through half the lunar mansions by day and by night in those periods respectively."

Now since a muhurtta is forty-eight minutes of time, or twelve degrees, it follows that the hour-angle from sunrise to noon on the longest day was equal to one hundred and eight degrees. Assuming the obliquity of the ecliptic to have been twenty-three and a half degrees, and omitting for the present all consideration of refraction, we obtain the following results from the solution of the well known quadrantal triangle Z P S, where Z is the zenith of the observer, P the north pole, and S the sun at rising,

sine $(ZPS-90^\circ) = \text{cotan } ZP . \text{cotan } PS$, or, l being the latitude of Z,

$$\tan l = \text{sine } 18^\circ . \text{cotan } 23\tfrac{1}{2}^\circ$$

Hence the latitude is 35° 24' approximately. This value of the latitude however involves the assumption that refraction was allowed for by the writer, which cannot well have been the case; it is therefore necessary to find the effect of refraction on the longest day.

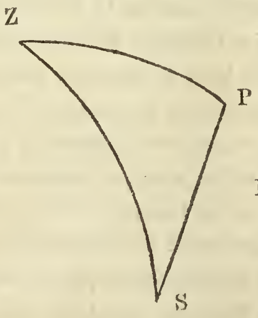

Fig. 1.

In Figure 2 T is the true place of the sun when it appears to rise at V, T V being 33′ according to received opinion. Then T P S = dh, the error in hour-angle due to T V. Hence from the spherical triangles S P T, S P N, and the plane triangle S V T we obtain

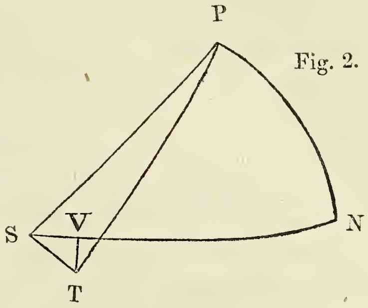

Fig. 2.

dh = T V cosec P S. cosec S P N sec P N.
= 33′. cosec $66\frac{1}{2}$.° cosec 72.° sec 35° 24′.
Therefore dh = 46·4′
m. sec.
= 3 " 5·6, or nearly one-sixteenth of a muhurtta.

Having the preceding approximate effect of refraction, we recalculate the latitude for a new hour-angle of 107° 14′ for sunrise; and, on so doing, the corrected latitude comes out 34° 16′.

The round numbers given by the writer imply that his estimations were rough; and this is corroborated by his making the length of the shortest night equal to that of the shortest day, when the two must differ by the sum of the effects due to four refractions. There seems however no reason to doubt that the author of the passage was an inhabitant of some place lying between 34° and 36° north latitude; indeed the very confusion apparent in his astronomical views renders his testimony more trustworthy, by proving that his remarks were drawn from observation and not from theory.

When we turn to the map, we find Cabul, Cashmeer and a few other towns within the limits above-mentioned; but Hindustan, according to its modern boundaries, is seen to lie generally without and to the south. This circumstance, agreeing as it does with Brahminical traditions of a migration from the north-west, appears to merit further investigation.

E. B. P.

II. *The Migratory Races of India. By Assistant Surgeon* Edward Balfour, *Madras Army.*

The Coorroo.

This seems to be a branch of the Korawa people, two divisions of whom, the "Bajantri Korawa," and "Tiling Korawa," were described by me in an article on the Migratory Tribes of India, which appeared in Jameson's Edinburgh Journal for July 1843, and was re-published by the Bengal Asiatic Society in their Journal for July 1844.*

I have been desirous of adding to the information which I then communicated, but all the tribes, whom I have since met with, have evinced so much timidity in their intercourse with civilized people that little could be gathered from them, worthy of being detailed; and I have seen none of them more timid than the tribe whom I am now describing which will account for the meagre information I am here capable of affording.

This wandering race occupy the Ceded Districts and are called by Mahomedans "Koorshe Wanloo;" Telings give them the names of "yerkel wanloo," "yera keedi" and "yera kelloo," and

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* The tribes then described by Mr. Balfour were; The Gohur, the Bhowrie; the Taremook; the Bajantri Korawa; the Tiling Korawa; the Bhatoo, and the Muddikpor. We would feel much indebted for any contributions to this branch of ethnological inquiry, the importance of which cannot be better illustrated than by quoting the remarks with which the editors of the Bengal Asiatic Society's Journal, when re-printing Mr. Balfour's former paper, introduced it to their readers. "We have copied the following interesting article from Jameson's Edinburgh Journal, No. 69 for 1843, and we add to it, from Dr. Voysey's Journals, his brief vocabulary of the Goand and Cole words. We cannot, on this occasion, refrain from again urging upon gentlemen, who may be so situated as to be able to obtain these notices and vocabularies, the extreme importance and great utility of doing so. It is impossible we think for the oldest resident in India to read this curious article without being struck with the reflection of how much there is in India of which we as yet know little or nothing, and yet the knowledge of which is so important to us in every capacity."—Ed.

the Aravas know them as Coortee; but their designation, among themselves, is Coorroo the *rr* being pronounced by them with a loud trilling sound.

I believe them to be a branch of the Korawa people from the similarity of their customs, and from their using similar articles of diet, but the term korawa was quite new to this community who, although familiar with the appellations of the Mahomedans and Hindoos, told me that Coorroo was the only name they ever designate themselves by.

They mentioned, however, that their people are arranged into three divisions—the Sati-Parm; Ka-Warm, and Mianr-Gotum, and that the families of these divisions all intermarry; eat together, and follow the same occupations.

They live in huts constructed of mats, very neatly woven from a long grass, named in telagoo "zamboo," which grows in the beds of tanks, and which they spread over a bamboo frame work. They are incessantly on the move, wandering about the country, and they never reside inside of towns, but pitch their little camps on open plains three or four miles from some inhabited place. They rarely remain above two or three days in one spot and their journeys are of considerable length as may be supposed when I mention that one community that I fell in with encamped near Bellary, had that day made a march of 30 miles from Sundoor, and, after halting two days, returned twelve miles back to Coortnee.

The value of one of their huts would scarcely amount to half a rupee (one shilling,) asses, goats and pigs constitute their wealth; the two last of these they use as food and sell for money in towns. They, likewise, earn a little by selling grass mats, and baskets made of canes and bamboos, the handy work of the men, but which are sold by the women who load these articles on the asses and thus drive them to the towns for sale.

Each family in their communities, lives apart in its own hut, constructed, as above mentioned, by the mats woven by themselves.

When they travel the mats are rolled up into a long bundle, the bamboo frame work of the hut is bent, and, with their whole household wealth, is made to fit inside the four legs of the cot which is kept for the husband to sleep on, one end of the cot thus inverted, is placed over a donkey's back and the other end drags on the ground.

The men informed me that they usually marry about the time that their mustaches appear (18 years of age?) with women who have attained maturity, and a bride is never taken to her husband's hut before two months after this period of her life. They marry only one wife, but they can keep as many of their women as they choose. The greatest number however that any of my informants remembered to have seen in one man's hut, was one wife and three kept women; this latter class being in general widows. They told me that this is the usual mode of providing for their females whose husbands die, and the position of their women, therefore, seems preferable to that of the abject slavery which the widows of the hindoo castes are compelled to endure.

The marriage ceremony consists in sprinkling rice and turmeric over the bride and bridegroom's head; and after it is over the bride returns to her parents and remains with them for five days. This period is passed in feasting on fowls and goat's flesh, and rice; and drinking spirits and milk; and, on the fifth day, the relations tie five pice, five betel leaves, five betel-nuts, five pieces of turmeric, five seers of rice and one cocoanut in the young wife's sarhi and conduct her to her husband's hut where more feasting is made, and the married people are then left together.

It is almost impossible to learn the social customs of a people by questioning them, and, when an inquirer meets with such extreme timidity as the people of this tribe manifested, the difficulty of becoming acquainted with their ways is greatly increased. In one of their customs, however, which they told me of, they differ so much from the people of this country, that it deserves mention here.

The Coorroo attaches much importance to the purity of their unmarried females, but they regard a want of integrity in their married women, as a trivial matter. They affect to be very vir-

tuous, and expressed themselves shocked when I asked if they ever devoted their girls to the hindoo gods;* but, notwithstanding this affectation of propriety, however much a wife may err, they never, under any circumstances, send her away: they fine the lothario twelve or sixteen rupees, and beat the woman, but she is never divorced.

They recollected some rare instances of their men having married with girls who had reached puberty, but such wives are never sent to their husbands until two months after they have grown up.

On first reaching maturity the young woman lives apart for three days, during which she receives a cocoanut and some rice for food, and at the expiration of that period she bathes and her young companions are invited to a feast where rice and clarified butter and treacle are plentifully distributed. The same ceremonies are gone through on the following month, but, unlike the Hindoos, their women never afterwards live apart. Their marriages are usually prolific and my informants have seen so many as ten children alive, all of them the offspring of one mother.

They drink all sorts of intoxicating drinks, but never use opium or any of the preparations from hemp. Their principal article of diet is jooaree, "holcus sorghum," and their meals are taken at six in the morning, at noon, and again at sunset. They never use the flesh of the horse, jackall, tiger, cheetah, or crow; but they eat the hog, mouse, rat, wild rat, and fowls.

All my questions failed to elicit any information to show that they know any thing of the existence of a Supreme Being as a principal of good, or of heaven, or other place of rewards; and it is difficult to say what their religion is. They do not bind on the tali in marriage, or use any of the Hindu sectarian marks on their foreheads, neither do they revere the Brahmans or any religious superior, nor perform any religious ceremony at any Hindu or Budhist temple, but they told me that when they pray, they construct a small pyramid of clay which they term Mariammah and worship it. But

* The surprise they then manifested may possibly have been occasioned by their not worshipping the hindoo deities.

though they seem thus almost without a form of religion the women had small gold and silver ornaments suspended from cords round their necks and which they said had been supplied to them by a goldsmith from whom they had ordered figures of Mariamma. The form represented is that of the Goddess Kali the wife of Seva.

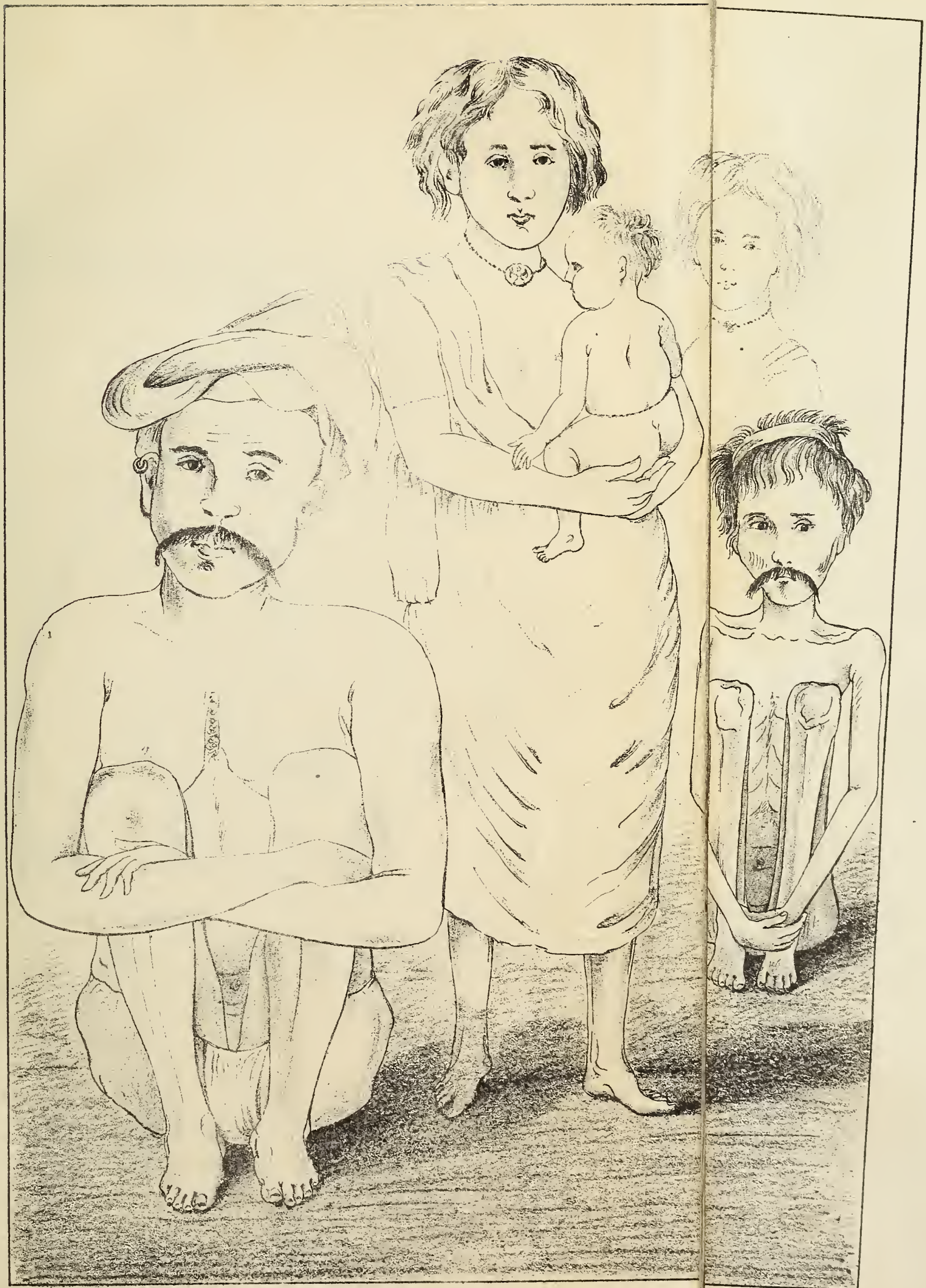
They mentioned that they had been told by their forefathers, that when a good man dies, his spirit enters the body of some of the better animals as that of a horse or cow, and that a bad man's spirit gives life to the form of a dog or jackall; but though they told me this they did not seem to believe in it. They believe firmly, however, in the existence and constant presence of a principle of evil who, they say, frequently appears; my informant having himself often seen it in the dusk of the evening assuming various forms, at times a cat, anon a goat, and then a dog, and so a cat again, taking these shapes that it might approach to injure him.

When they die the married people are burned, but the unmarried are buried, quite naked without shroud or kufn, or other clothing, a custom which some other castes in India likewise follow; and, on the third day after the funeral, they place rice over the grave of the deceased, but draw no omens from the manner in which the food is carried off by animals.

The Coorroo people are naturally of a bamboo colour, though tanned by the sun into a darker hue. Their faces are oval with prominent bones, their features having something of the Tartar expression of countenance, and some of the women are pretty, at least passable in their faces, but all of them had ungainly figures.

The men average about 5 feet 3 inches in height, and the women 4 feet 9 inches. The men had only a blue cloth twisted on their heads, a loin cloth, and a blue kumrbund for clothing; but all the women wore the choli and sarhi with rings and armlets of brass.

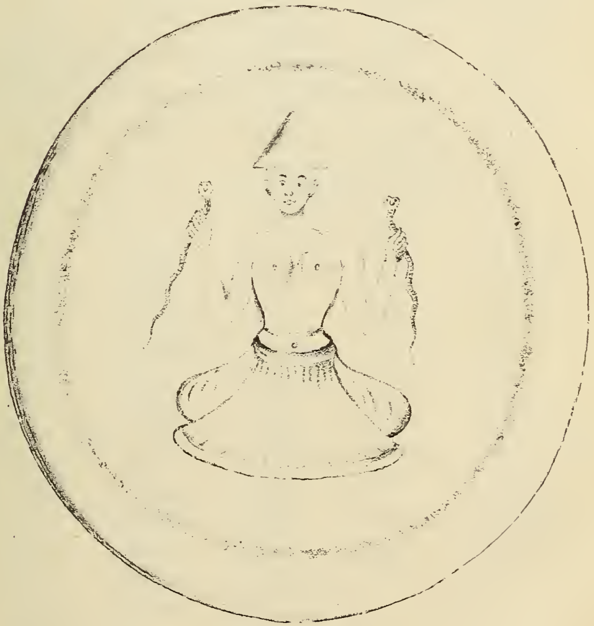
The dialect spoken by the "Coorroo," as their lingua franca, in their intercourse with the people of the country is the Teloogoo, and I was surprised to find them entirely ignorant of the Canarese language although living exclusively among the Canarese nation. Amongst themselves, they have a distinct dialect but from their timidity I could only get from them a few of their words.



A COORROO FAMILY.

Sinclair Lith.

The Image suspended from the neck of the Coorroo Women.



English.	*Coorroo.*	*English.*	*Coorroo.*	*English.*	*Coorroo.*
Sun,	Pogadoo.	Marriage,	Kenyal.	Hen,	Pota koi.
Moon,	Nelloo.	Death,	Chitoosh.	Duck,	Juk.
Stars,	Sookha.	Cold,	Eeda.	Tiger,	Beeree Welee.
Clouds,	Moon. Mubba.	Bad,	Kotu	Hot,	Kufaim.
Sky,	Minna.	Slow,	Melli.	Small,	Chinna.
Earth,	Tirra.	Calf,	Kora dora Pai dora.	Quick,	Bheeri.
Stone,	Kellay	Eve,	Endewai Putlai.	Thirst,	Tani pesh.
Water,	Tinni.	Light,	Tillawars.	Ass, male,	Pot kayda.
River,	Ar.	Darkness,	Moobars.	Ass, female,	Pota kayda.
Hill,	Dinnay.	Sunshine,	Woga.	European,	Monama.
Mountain,	Malla.	Fire,	Nerpoo.	Salt flavor,	Kharm.
Rain,	Maga.	Thunder,	Wooroo-madum.	Kite,	Geedda.
Bird,	Karwadee.	Lightning,	Woombut-soo.	Crow,	Kak.
Wife,	Dengeree, Pondee.	Wind,	Galee.	Sweet,	Teepke kida.
Boy,	Magni.	God,	No beneficient being understood	Wheat flour,	Maoo.
Girl,	Magli.	Angel,	Ditto.	Grinding-stone,	Noki.
Bull,	Marr.	Devil,	Dew wum.	Head,	Tilkai.
Cow,	Pota Marr.	Man,	Pot.	Eye,	Kimnao.
Horse,	Koodra	Woman,	Pota.	Nose,	Mukh.
Mare,	Pota Kodree.	Husband.	Munagum.	Ear,	Sooyee.
Fish,	Meena.	Sword,	Kettee.	Mouth,	Wai.
Grass,	Giddee.	Black,	Kurta.	Great,	Pera.
Tree,	Cherree.	White,	Wulla.	Good,	Neela kochudoo.
Bread,	Rutti.	Red,	Yerra.	Hunger,	Kuli pesh.
Day,	Tella Wars.	Green,	Putse.	Shoe,	Muchee.
Night,	Pogadoo Boots.	Wheat,	Godm.	Sarhi,	Chera Phaka.
Morn,	Tilla Putli.	Dog,	Nai.	Salt,	Oopa.
Son,	Magni.	Bitch,	Pota Nai.		
Daughter,	Magli.	Boar,	Pendree.		
Father,	Aweva.	Sow,	Pota Pendree.		
Mother,	Ammum.	Cat,	Pona.		
Grand father,	Tata.	Rat,	Yellee.		
Goat,	Mĭăkă.	Deer,	Kanitee.		
Jackall,	a. Chinaga b. Nakka c. Kopul Nakka.	Cock,	Sao-koi.		

III. *Remarks on the Ethnography of Bellary in the Ceded Districts. By Assistant Surgeon* Edward Balfour, *Madras Army.*

Bellary lies in 15° 5' north latitude and 76° 59' east longitude in the Balaghat Ceded Districts, at an elevation of 1,182 feet above the level of the sea, which is distant 220 miles, on the Western Coast, and 240 on the Eastern, the ghats on either side being about 180 miles distant.

Since this portion of the Balaghat came into our possession on the 12th October 1800, the districts, then ceded, have formed one of the Military divisions of the Madras Presidency, but, for the Civil Government, they have been divided into two Collectorates, that of Cuddapah, in the east and of Bellary in the west. The Zillah of Kurnool is now under the charge of a Commissioner, but it only came under our care in 1839, after the battle of Zorapoor was fought.

The fortress of Bellary is built on a bare granite hill 450 feet in height and a mile and a half in circumference; the rock presents a smooth unbroken surface on the south-western side, but on the north and east it is broken up into great masses of rock which lie heaped and piled above each other to the summit.

The inhabitants resided within the fort until 1816, but in that year, they were removed to a new town called by the inhabitants Nowa Pettah or Bruce Pettah. The European troops have continued, since then, to occupy the fortress, but even they are now being withdrawn from it and in a short time it will be wholly abandoned like most of our other hill forts.

Though the steps on the eastern side of the rock are steep and rugged, the ascent to the summit well repays the trouble in the birds-eye view obtained of the country. The military Cantonment with the Cowle Bazaar and Bruce Pettah are seen encircling the rock from its north-western to its eastern side; about 4 miles

to the west the view is interrupted by a few hills, which attain an elevation of 2,800 feet above the sea, but on the south and east and north the eye falls on a level plain of black earth with a few bare rocky hills on its surface, and this part of the country being, for the greater part of the year, almost without a tree, it has a bleak and arid appearance particularly uninviting. The only period that the prospect is at all attractive is after the rains fall in June when, from the fertility of the black cotton soil of the country the surface becomes clothed with luxuriant crops.

The character of the country, however, is that of arid dryness, little rain ever falling here: the evenings and the nights and mornings are cold, and it continues cool up to nine or ten o'clock of the day, but from eleven in the forenoon until four in the afternoon the heat is intense and the sparkling glare from the earth is particularly distressing to the eyes.

There are about forty-five thousand people residing around the fortress, but fully three-fourths of this number are strangers to the country, being the soldiers and their followers and the tradesmen and others in the Cowle Bazaar who depend on the presence of a military camp for a livelihood.

A population of this description is always fluctuating with the presence or absence of the troops, and a census of one year would, perhaps, in the succeeding year be no indication of the extent of the population. According to a census taken in 1837 there were, in the two divisions of the camp, as follwos :

		Males.	Females.	Children.	Total.
1837	Cowle Bazaar, - -	6,076	4,559	4,937	15,563
	Bruce Pettah, - -	4,592	4,979	5,287	14,863
	Total..	10,673	9,538	10,224	30,426

But, in the year 1844, a more extended census was taken and the numbers of the people were as follows:

Statement of the Population, resident and fluctuating, in the Military Cantonment of Bellary, in the year 1844.

	Number of Houses.	Resident Population.				Fluctuating Population.				Number of Resident and Fluctuating.				Average per House.			
		Males.	Females.	Children.	Total.	Males.	Females.	Children.	Total.	Males.	Females.	Children.	Total.	Males.	Females.	Children.	Total.
Cowle Bazaar....................	3,969	4,455	5,133	6,047	15,635	300	500	200	1,000	4,755	5,633	6,247	16,635				
Bruce Pettah.....................	3,893	5,282	5,535	5,556	16,373	350	400	150	900	5,632	5,935	5,706	17,273				
2d Regiment Lt. Cav. (*Natives*)....	1,220	1,227	1,347	1,428	4,002	25	26	15	66	1,252	1,373	1,443	4,068				
B. Compy. 3d Bat. Art. (*Europeans*)	70	45	57	43	145	35	52	57	144	80	109	100	289				
Karkanah attached to do. (*Natives*)	67	33	41	53	127	6	11	14	31	39	52	67	158				
H. M. 63d Regiment (*Europeans*)..	21	33	7	85	125	0	0	0	0	33	7	85	125				
24th Regiment M. N. I. (*Natives*)..	900	1,100	852	547	2,499	0	0	0	0	1,100	852	547	2,499				
25th Regiment M. N. I. (*Natives*)..	963	1,351	247	1,029	2,627	49	36	21	106	1,400	283	1,050	2,733				
Arsenal Department (*Natives*).....	183	202	189	229	620	0	0	0	0	202	189	229	629				
Total..	11,286	13,728	13,408	15,017	42,153	765	1,025	457	2,247	14,493	14,433	15,474	44,400	1·2	1·2	1·3	3·9

As it may be interesting as well as instructive to many Europeans to learn the social and religious divisions of the population of an Indian town, I subjoin a detailed statement of the above abstract showing the members of each caste and sect and community in the Cowle Bazaar and Bruce Pettah.

Enumeration Roll or Census of the various Castes and Classes and Sects among the inhabitants of Bellary in the Ceded Districts.

Castes and Sects.		Bruce Pettah. Houses.	Bruce Pettah. People.	Cowle Bazaar. Houses.	Cowle Bazaar. People.	Total. Houses.	Total. People.	Remarks.
Brahmins		178	1040	25	100	203	1140	
Cheyatries		9	62	9	34	18	96	
Rajpoots		26	121	44	140	70	261	Natives of Rajputanah of any caste.
Bards	or Bhutraj	4	19	2	4	6	23	These are a class of Sudrs (though they themselves claim to be Cheyatries) whose occupation is to proclaim the titles of kings and be their eulogists.
Vesyas	,, Comattee wanloo	148	758	56	224	204	982	Pure Vesyas, occupied as traders and other peaceful occupations.
Parsees	,, Guzerattee do.	2	8	2	8	4	16	The Parsee Fire worshippers.
Jains	,, Jain do.	2	8	1	6	3	14	Buddhists. This sect are often greatly persecuted by the Brahmins.
Sudrs who are Village Authorities or Meerasdars.	*a* Packinatee do.	41	188	8	37	49	225	These Village authorities are styled Reddy in Tamil and Telagoo, or by the Mahratta term of Potail. They collect the Government rents. They claim to be the true owners of the land in most of the countries in Southern India.
	b Moottatee do.	1	6	1	5	2	11	
	c Vellanatee do.	25	121	5	23	30	144	
Husbandmen of the Sudr caste.	*a* Peracoonty Capooloo	10	44	0	0	10	44	
	b Goongeddy do.	1	4	0	0	1	4	
Jungum sects.	*a* Jungum wanloo	80	328	6	20	86	348	*a* Worshippers of one Lingum.
	b Punchabanjeeka do.	165	1081	22	79	187	1160	*b* ,, ,, five Lingums.

Castes and Sects.			Bruce Pettah. Houses.	Bruce Pettah. People.	Cowle Bazaar. Houses.	Cowle Bazaar. People.	Total. Houses.	Total. People.	Remarks.
A caste of Sudrs. . .		Laneeka wanloo . . .	6	27	0	0	6	27	
		Cudeywaklee wanloo.	27	95	0	0	27	95	The women of this caste dress their hair in a bunch on the right side of their heads.
Lingaet sects. . . .	a	Linga bulgee wanloo.	8	37	12	27	20	64	a This sect wear the Lingum the emblem of Seva in a silver casket on their breasts, suspended from their necks.
	b	Jaloroo bulgee. do.	14	79	0	0	14	79	b This sect wear the Lingum on their right arm.
Shopmen.	a	Wana ganakaloo wanloo. . . .	1	7	2	3	3	10	a, b, c These dealers or shop keepers are called in common parlance "Telli" or Oilmen.
	b	Curraganika wanloo.	5	22	0	0	5	22	
	c	Punchunganigaloo .	8	36	0	0	8	36	
Worshippers of Seva	a	Chippegeree or Nagaleka bulgee wanloo . . .	18	81	40	199	58	280	a Worshippers of Seva in the form of the Cobra Snake.
	b	Seva chipaga wanloo.	3	21	0	0	3	21	b Worshippers of Seva.
		Gumpe Cumloo or kamawaroo. . . .	18	64	2	2	20	66	This caste permit no strangers to enter their houses, they are husbandmen.
Hindoo Hawkers . .		Yailm wanloo. . .	131	709	261	1059	392	1768	These people follow the trade of writers, painters, and indeed any but an occupation involving manual labour.

Pure Sudrs of unmixed caste.	*a*	Telagoo bulgee wanloo	155	945	275	1112	430	1757	*a* These Sudrs consider themselves to be the unmixed original race as they
	b	Chetty bulgee wanloo	33	142	26	320	59	462	*b* sprung from their creator.
Shepherds, Milkmen	*a*	Oree golla wanloo .	67	353	76	298	143	651	*a* Divisions of the Shepherd or Cowkeeper
Wool Shearers;	*b*	Coraba golla wanloo.	79	308	144	657	223	965	*b* caste, who are all of the same people or race and intermarry. There are
Shepherds; Cow-keepers.	*c*	Hundee Coraba do .	36	116	56	180	92	296	*c* several other sections of this caste.
Goldsmiths . . .	*a*	Comsalla wanloo .	38	146	15	58	53	204	*a* Five trades or employments the men
Carpenters . . .	*b*	Wodla wanloo. . .	13	53	5	26	18	79	*b* of which are divisions of the same
Blacksmiths . . .	*c*	Comala wanloo. .	8	30	4	19	12	49	*c* religious caste, all of whom inter-
Braziers	*d*	Consagara. . . .	3	6	3	10	6	16	*d* marry and wear the zonar or sacred thread which is called in Telagoo
Stone cutters. . .	*e*	Sungtrasha. . . .	1	6	0	0	1	6	*e* "Junjum."
Mendicant Priests.		Dewanagee wanloo. . .	7	26	7	24	14	50	These mendicants accept of charity only from one or other of the five goldsmith trades above.
Migratory Grain Merchants.	*a*	Buljara wanloo. .	32	171	6	24	38	195	*a* The English call these people Binjaras,
	b	Corbana wanloo . .	1	2	0	0	1	2	*b* they are grain and salt merchants.
Weavers	*a*	Pursala wanloo . .	37	173	0	0	37	173	*a*
	b	Sumsala wanloo . .	9	38	0	0	9	38	*b* Divisions of the Weaver caste.
	c	Puttana sala wanloo.	10	54	7	32	17	86	*c*
	d	Sala.	27	122	5	22	32	144	*d*
Dancing Girls. . . .		Bogum wanloo . .	7	46	2	9	9	55	Religious devotees of the Vesya caste. They belong to the Rhumba and Oor Vussee sections.
Common Women. .		Kubera wanloo . .	43	192	33	160	76	352	
Potters		Comera wanloo . .	6	21	21	74	27	95	
Washermen . . .		Sackela wanloo. . .	47	230	90	311	137	541	
Barbers		Mungala wanloo . .	39	207	50	179	89	386	
Salt makers.	*a*	Upera wanlo. . . .	20	103	10	49	30	152	*a* These people are employed in digging
Quarrymen, Masons	*b*	Wadi wanloo. . .	29	147	21	62	50	209	*b* tanks, making salt and making roads.

Castes and Sects.		Bruce Pettah. Houses.	Bruce Pettah. People.	Cowle Bazaar. Houses.	Cowle Bazaar. People.	Total. Houses.	Total. People.	Remarks.
Arrack sellers.	Adega wanloo.	7	35	23	101	30	136	
Oil makers	Ganola wanloo	14	55	26	110	40	165	
Basket makers	Maydhera wanloo.	5	24	0	0	5	24	This caste also make the bamboo mats in our houses.
Dyers.	Rungaraj wanloo.	17	124	71	421	88	545	
Saddlers	Zeengar wanloo.	17	91	5	26	22	117	
Shoe makers	Moochee wanloo.	14	77	11	49	25	126	
Basket weavers	Coorchee wanloo	26	69	41	181	67	250	This caste make the mats of houses of Palm Tree leaves.
Watchmen	Mutraj wanloo.	3	8	0	0	3	8	Village watchmen paid by Government.
	Oor Boya wanloo	171	721	65	269	236	990	These men are mercenary Soldiers, and very devoted in their duties. They generally serve Native rajahs, &c. and very rarely enter our Army.
Mess servants.	Mess maty.	6	27	0	0	6	27	
Pariahs	Malla wanloo	164	559	351	1629	515	2188	People formerly expelled from the hindoo castes, or who have voluntarily abandoned them, remaining idolators.
Low castes.	Madega wanloo	118	430	222	1080	340	1510	These people eat creatures that die from disease; and unclean animals.
Butchers.	Larr kasai wanloo.	20	113	62	335	82	448	
Religious Mendicants, &c.	Satana wanloo.	0	0	1	3	1	3	These three sections are religious devotees and mendicants. The Satana keep a god "Permalloo," an incarnation of
	Jherra wanloo.	11	44	0	0	11	44	
	Dhasray wanloo	6	22	0	0	6	22	

								Vishnu in their houses and worship it daily. They perambulate the streets morning and evening and accept alms from all but the lowest castes. They often demand alms threatening otherwise to burn themselves with a lamp or torch. The Dhasray are a class who play on the "Jangata" "Tartec" and Sincoo and hold an iron worshipping lamp in their hands. They walk before the corpse when carried to the funeral pile.
Byragies.	Bairagooloo.	1	4	0	0	1	4	A class of Mendicants.
Gosaens.	Gossi wanloo	0	0	1	2	1	2	
Mahrattas.		82	401	51	204	133	605	
Aravas.		0	0	16	99	16	99	
Christians.		25	126	130	550	155	676	
Pindarees.	Baidera wanloo	4	19	2	3	6	22	These Pindarees are Mahomedans who keep numerous little horses which they use for carriage. They are great carriers, in fact, and are of importance in Military Cantonments and during Military operations.
Buddhists	Marvaree wanloo.	1	5	1	14	2	19	
Europeans	Dora wanloo.	0	0	19	99	19	99	
Mahomedans	Ain Turke wanloo	622	3354	811	3706	1433	7060	
Beef butchers	Gae kussai wanloo	1	3	13	62	14	65	
Cotton cleaners	Pinjaree wanloo	21	103	0	0	21	103	
Scavengers	Hulal khor.	6	33	1	8	7	41	

C

With a community of forty-five thousand people separated, as is seen from the above list, into seventy-five sects or religious castes or divisions, who neither eat nor drink nor associate with each other, and many of whom dare not even approach the presence of the other, it would be hopeless to attempt any description of their customs to be generally applicable; and from this being a border country to which the Aravas, and Telingas, and Mahrattas have been attracted by the number of troops, the difficulty of describing the people is increased.

The Native inhabitants i.e., the Canarese, have marked peculiarities which distinguish them from the foreigners; they are a simple minded people, wanting in intelligence, and timid in their intercourse with Europeans: their appearance is rude and the expression of their countenance dull. Crime of all kinds is rare and crimes against the person very rare, indeed. They arenaturally very unsuspicious and allow themselves to be deceived by the most open fraud. Litigation is unfrequent, and I am informed, that, on the Western Coast, at Cannanore, more criminal cases are tried in a week, than are brought forward here in two or three months. The dress of the Canarese is sufficient to distinguish them; they wear trowsers "saladum" that reach from the haunch to the calf of the leg; the trowsers are tightly girt at the waist with a "marcutta" or waist belt of white cotton, but they fall loose from the fork, like the canvass overalls worn by English fishermen. The Mahrattas, on the other hand, wear the "chiddi" or jehangeer, which fits closely at the hips and descends for a couple of inches on the thighs: the Mahomedans all wear long trowsers, and all the working classes of the Aravas, and Telingas, here, wear the dhotee or putchee, a long loose white scarf wrapped round the loins and legs.

The food of the Canarese, here, is jooaree and ragi, and they take generally three meals, one at daybreak, one at midday; and one in the evening. The evening meal is prepared for them after all their work is done, any portion of it remaining over is eaten after daybreak on the following morning before commencing work. The midday meal is likewise a hot one and is partaken during the inter-

val, they take to rest in the heat of the day, they use in general earthenware dishes unglazed.

The Brahmins as usual never use stale food, but eat their two meals freshly cooked, the first about eleven in the forenoon and the second at eight or ten o'clock at night.

The dishes they eat off are made of the leaves of trees, either of the plantain leaves, which in Bellary cost five annas the hundred, or off a round platter made of the leaves of other trees sewed or pinned together with pieces of bamboo or grass.

The Rajpoots or Cheytrees who have been born in this country live on the same food as the Brahmins, but those who have been brought up in Rajputanah and in Hindustan dine at noon on wheaten cakes fired on the girdle. This is the only hot meal of all this people and many of them make it their sole one; but, in general, they feed again at night (it cannot be called eating) on raw grains softened by being previously steeped in water. Owing to this protracted fasting some of them learn to use surprising quantities of food, and, I have been informed that, some of them will, at noon, eat three and even four pounds of flour made into cakes, and again chew two, three and even four pounds of soaked grain in the evening. The Cheytrees eat their food off brass dishes.

The strangers from Telingana and the Dravida country, the Telingas and Aravas, residing there, make rice their sole article of diet and never eat the jooaree or ragi, unless compelled to do so by scarcity, as these hard grains frequently occasion diarrhœa: the great body of the Dhers or outcasts here continue to use the bodies of animals that have died from disease and also to use creatures for food which other nations do not eat.

The other castes here have no peculiar mode of living as regards food. In this country wealth does alter the manner of life but not to an equal extent as in others, and, excepting the addition of a little clarified butter, and a little mutton there is but a slight difference between the food of the rich and the poor. It is not the practice among any Hindoo people for the wives to eat with their hus-

band, but when the head of the house has dined the wife sits down to the remnant on the dish or on the platter of leaves. It is only amongst the Mahomedans that any thing approaching to our habits is found, as with them, most married couples, when alone, sit down to eat together.

IV. *Statistics of the Sircar Yelgunthul. By Surgeon* T. L. Bell, *H. H. the Nizam's Army. On Special duty.*

This Sircar is situated between 18° 5" and 19° 5" North Latitude, and between 78° 30" and 79° 45" East Longitude,* and is bounded on the North by the river Godavery on the N.E. by the Sircar of Ramghere, on the N.W. by that of Nandair, on the S. and S.E. by Mullungoor, on the S.W. by Maiduc. Two Purgunnahs namely Vejeeghery and Velchal form a detached portion 8 miles to the Eastward, this is bounded on the North and West by Ramghere, on the South and East by Worrungul. The extreme length from N. to S. is 68 miles and breadth from E. to W. 48 miles not including the detached portion which forms an irregular parallelogram measuring 23 miles from E. to W. and 10 miles from North to South. The whole comprising an area of 27,554 square miles.

Aspect. The general aspect of the Sircar is hilly presenting ranges which cross it diagonally, separating from each other and bounding three extensive plains : at the S.W. part of the Sircar the lowest of these ranges is seen, passing from the S.E. to the North-West the height does not exceed 350 feet above the level of the plain, the length of this chain from where it enters to where it quits is 9 miles. The second is distant from the first 18 miles and parallel to it, enters 5 miles S.E. of Saniagarum and traverses the Sircar in a N.W. direction terminating near Ingul where it joins the Western range, by lower and almost detached hills ; its length is 32 miles.

The Western range commences 6 miles South of Ingul, and proceeds North increasing in elevation as it advances ; at some points

* Geographical Memoir.

acquiring an altitude of 800 feet above the level of the plain, the Western aspect is steep, the Eastern slopes and meets the Northern slope of the second range, and the Southern of the third, forming a Table Land : this range sends out a spur to N. N. E. which terminates at Velloolah.

The third is the only one proper to the Sircar; it is distant 32 miles N.E. of the last ; commences near Garapully where the height does not exceed 100 feet, passes N.W. gradually increasing in importance, as far as the pass between Poodoor and Juctial, where it acquires its greatest altitude, and from thence pursuing its original direction towards Yamulcoortee but gradually diminishing in height ceases altogether two miles from the Godavery ; its highest point eight miles N. from Poodoor is 600 feet above the plain. The fourth has, like the first, only a limited course of about 15 miles ; entering the Sircar at Jagadeopett from Ramghere, it has a greater altitude than the small range at the S.W. corner, but it does not attain that of either of the others—it terminates by a gradual slope near the Godavery at Kumlapully. These are the important hills as by them the plains are bounded ; and from them derive their mineral characters. There are others of less elevation scattered over the Sircar, rising from the plains either singly or collected into irregular groups. Two extensive plains are contained between the first and third ranges of hills separated by the second; that between the second and third is the largest, they both are longitudinal running parallel to the hills which bound them, both have a gradual rise in a N. and N.W. direction, and the largest merges into the Table Land described as formed by the shelving of the Western hills. North of the Podoor range the Sircar consists of various smaller vallies formed by spurs of that range, the general declination is now towards the North and East; between the fourth range of hills and the Godavery is a slip of level country 18 miles in length and of a breadth varying from 3 to 4 miles.

These plains and vallies as well as the ranges of hills are covered with vegetation, except where the former have been cleared for agricultural and the latter shoot up into dome shaped, pinna-

cled, or mural summits. In the South, this is brushwood, while North between the third or Podoor range and the Godavery the stunted wood has disappeared and given place to trees, but in no part of the Sircar do these acquire the size of forest trees or dimensions sufficient to yield what is generally understood by the wood timber.

Geology. The rocks of the Sircar belong to the primary, and secondary or transition periods, and for the most part to the first, syenite being the prevailing rock. The range of hills at Gumbeerowpett in the S.W. corner are granitic and composed of felspar, quartz, hornblende, and also mica, but the last in very sparing quantities, the three former components are in equal proportions, fine in grain, and form together a light coloured durable stone. This range does not present that diversity of summit so conspicuous in other granite hills; having a waving outline, with a gradual slope on both sides, that on the South being the most abrupt (23°) the loose fragments are smaller, than in those granites in which the components are less equal in proportion, and larger in crystal.

The second or Sircilla range is syenitic, the mica having entirely disappeared, and felspar acquired a great preponderance over the other minerals, existing in crystals of an inch and even two inches in length, of a pale red colour. This range presents an irregular and broken outline, and with it every variety of shape which can be formed by its pyramidal and cuboidal masses; towards its South Eastern extremity this characteristic is frequently absent, and the dome shape common, and when this happens the crystals are seen to be in more equal proportions, and of a smaller size. This range is much weather-worn, all the angles of its detached masses are rounded, and the surfaces soft, and easily broken, and as a useful stone is much inferior to the Gumbeerowpett range. North of this, but towards the S.E. part of the adjoining plain, solitary hills are numerous of the same general character, the felspar having changed its fleshy to a smoky colour and a few small plates of opaque and yellow coloured mica are to be seen occasionally.

The third or Podoor range is partly granite, partly gneiss, the South side presenting an even grained rock constituted of the four ingredients of granite, the summit of the range is of the same formation, at a distance of 100 yards from which, down the Northern slope it passes into gneiss, this disappears one mile from the base. Tracing this rock N.W. it is found to maintain its position with regard to the range as far as Murragoodum 15 miles; and is then lost, but appears again as the surface rock near Metpully 20 miles more to the N.W. where it is lost; in the S.E. direction it disappears near Rammudoogoo, 12 miles from Podoor, making the whole length of this formation 32 miles with an average breadth of 1—the bed is almost vertical. In this rock mica is sparingly abundant, and frequently the felspar gives place to thin layers of iron ore. Pursuing the N.E. direction from Juctial, there is a broken line of granite hills seen, passing from Thevecondah by Polass in a N.W. direction; the altitude of these does not exceed 300 feet and upon the highest is a portion of masonry, all that remains of the Fort of Thevecondah. The granite of these passes into gneiss at Murrealah forming a range of low conical shaped hills, with a direction parallel to those already described, and offering a striking contrast to them, in their smooth tops and slopes; towards the N.W. they are lost a short distance from the right bank of the Godavery; to the S.E. they are continued into a similar range in the adjoining Sircar. In contact with and accompanying them on the N.E. side is a band of limestone, about 80 yards broad, and parallel with it, a belt of silicious sandstone between this and the river a distance of 5 miles the surface rock is granite.

Trap dykes are common, traversing the Sircar from E. to W.

The mineral substances worthy of notice are kaolin, steatite, corundum, limestone and the ores of iron; kaolin is abundant but of a yellowish colour, and although found in various parts of the Sircar little difference is observed in its quality—that found at Linganapett is the purest; it is never used. Two varieties of steatite are found, one in the first range of hills near Yellareddypett, the other in the third near Korutla; the first is of a greyish colour, the other black, the former is not so common as the latter,

which is much used for making cups and vessels to hold the acid condiments of food.

The compact crystalline corundum is found near Podoor, and has been pronounced to be of superior quality, the specimens were obtained during the rains from the bed of a nullah which as well as others in the neighbourhood contained too much water to permit of being properly examined, and an opinion formed, regarding the probable quantity to be obtained. As this mineral has assumed importance as an article of export from Madras, another opportunity will be taken to report on the capability of Podoor in connection with Palomcha for yielding a supply.

The position of the limestone has been previously mentioned. It is a carbonate, compact, hard, sonorous, and even in texture with a blueish tinge, and an excellent building material. It is not used but might if required be quarried with facility.

The ores of iron are found scattered throughout the Sircar and in the villages of Godoor, Mogulpett and Chinttacoortee, in the Western part extensively smelted. It is obtained as an oxide from gneiss by pounding, and separating the stony matrix with the hand, or subjecting the powder to a stream of water, and also from the beds of nullahs which have their source in the gneiss hills, and into which it is washed during the rains and stopped in its course by weirs placed across the stream for that purpose.

In the villages to the N.E. magnetic iron ore is worked and produces an excellent iron. Towards the S.W. in the villages of Annavarum, Gajasingavarum and Gomital the ferruginous claystone found upon the tops of the hills in the Western range is smelted.

Soils.

Much importance is attached to the value of soils by both zemindar and ryot, and the latter shows great discrimination in attributing a proper value to lands allotted to him from his perfect practical knowledge of their productive qualities. Should the zemindar hold out for more than the cultivator considers the soil capable of producing in addition to the usual remuneration for his own labours, the dispute generally terminates by falling back upon the buttae the cowl when both share equally.

Sinclair Lith.

The following is a list of soils in the order of their esteemed value. The uchha regur being considered the most fertile, and the salee doobbee as unfit for any agricultural purpose whatever.

Uchha regurree, cutta regurree, chowka regurree, paurah, yerra chukka, pawtee, choonakaputterka regurree, chowtak zemin, rewa, chowtah sowdoo, ghedoosoo boome, rala sowdoo, salee doobbee.

The uchha regurree is found only on the banks of the Godavery and superimposed upon trap dykes, and, although its position generally precludes the possibility of bringing it under rice cultivation, it is when favourably situated for that purpose equally fertile with the cutta regurree the usual rice land, which differs from it in mechanical as well as in chemical constitution, the uchha is blacker in colour, more plastic when wetted yet parting with its moisture sooner than the cutta; the chemical difference being the possession by the latter of more organic matter and silica and less lime. They are rated equally when similarly situated. The chowka regurree is a reddish soil good for rice, and jooaree is a mixture of decomposed syenite with vegetable matter, owing its colour to the felspar; the other varieties enumerated are mostly of a light nature forming the high lands and cultivated for millets.

Atmosphere and Climate.

The climate partakes of that of the general character of that of the Deccan, from June to October the N.W. and from October until April the N.E. monsoons blow across the Sircar. July is looked forward to with much anxiety by all classes as in that and the succeeding month the annual supply of water is expected; sacrifices are privately made in the house of every husbandman to Gunnatheputtee and publicly the goddess Pochummah is deluged with the blood of goats that no failure may occur in this respect. Rain does not fall equally in all parts of the Sircar, the Western Purgunnahs always getting a larger amount than the Eastern, and this apparently is caused by the ranges of hills which traverse it; in the Racherla Purgunnah a sufficient quantity generally falls to allow of the usual extent of land being prepared for seed, and every three years an extraordinary fall is calculated upon with some degree of certainty; while in the Arsakota and Thevecondah Talooks besides the annual supply being

considerably less, a heavy fall is anticipated only once in six years; these Purgunnahs at the setting in of the N.E. monsoon are visited by a few days rain which is not desired by cultivators in consequence of damaging the jooaree crops ripening at that season.

Productions. The total area of arable land has been estimated at 416·7 miles*, but as the assessment is the same now, as it was when this estimate was made, and in the last year only 84½ miles were under cultivation the probability is that the real extent is considerably less.

TABLE *showing the quantity of Agricultural Produce in grain raised from June* 1850 *to June* 1851 *and gross value.*

Grain.	Quantity.			Value.		
	Candies.	Maunds.	Seers.	Rupees.	Annas.	Pice.
Paddy	27,167	14	0	4,07,515	8	0
Jooaree	4,613	19	15	74,487	8	6
Wheat	31	13	8	1,162	0	8
Indian Corn	1,038	17	8	12,741	0	2
Samah	1,300	1	22	13,908	4	8
Raggy	115	11	2	1,242	6	0
Moongh	279	13	14	6,258	13	0
Thoor	254	2	20	4,011	14	8
Kungonee	196	0	14	1,998	12	6
Chennah	304	10	28	6,446	14	4
Gram	134	1	10	2,043	5	0
Bajeerah	5	4	0	67	4	0
Mussoor	6	8	8	84	14	0
Total....	35,447	16	29	5,31,968	9	6

TABLE *showing the quantity of Material for Manufactures grown in the same period and value.*

Description.	Quantity.			Value.		
	Candies.	Maunds.	Seers.	Rupees.	Annas.	Pice.
Cotton	1,063	8	2	25,080	13	4
Hemp	86	10	0	866	8	0
Total....	1,149	18	2	'85,946	5	4

* Geographical Memoir.

TABLE *of Produce for the same period of Garden stuffs and Oil Seeds with value.*

Description.	Quantity.			Value.		
	Candies.	Maunds.	Seers.	Rupees.	Annas.	Pice.
Thill.	1,727	15	38	3,402	15	8
Castor.	294	4	20	4,422	1	10
Tobacco.	271	19	2	5,179	5	0
Chillies, Onions and Goor. .	946	0	1½	9,732	7	4
Total. . . .	3,239	19	21½	22,736	13	10

It is difficult to ascertain the exact number of beegahs under seed, as the dry crops are in some talooks cultivated under the nagur cowl and not by measurement, but from the produce and the known capability of land where such is adopted a near approach may be made to accuracy.

TABLE *showing the number of Beegahs under cultivation, amount and value of Produce of all kinds and average value of Produce per Beegah.*

Beegahs.	Produce.			Value.			Average value of produce per Beegah.		
	Candies.	Maunds.	Seers.	Rupees.	Annas.	Pice.	Rupees.	Annas.	Pice.
54,111	39,837	14	12½	640,651	12	8	11	13	5

A list of the spontaneous vegetable productions most deserving of notice has been appended. No wood is cut for the market. The chironjea sapida and morinda citrifolia, both yielding a red dye, are in extensive use and in the neighbourhood of Juctial and Korutta where they are in most request are cultivated.

Stock is generally considered in conjunction with culture. The number of all sorts amounts to 2,66,991. The following Table shows the different kinds.

Description.	Number.
Draught Cattle	44,907
Dairy	1,23,875
Sheep and Goats	96,861
Horses and Asses	1,348
Total....	2,66,991

In the General Table is exhibited more particularly the number of each description of species—no attention is paid to breeding and the land is overstocked during the cold and wet months, the forage for their support is barely sufficient, and the fodder housed is quite inadequate to their wants during the hot season ; consequently when the herbage fails they die in hundreds, either from want of food, or diseases induced by its improper quality. Both bullocks and buffaloes are small, averaging in price for draught fifteen rupees per pair—a she buffaloe giving 4 seers of milk (the usual quantity per diem) brings thirty-two rupees ; a cow which seldom gives more than 2 seers, fetches ten rupees. A pair of either buffaloes or bullocks are sufficient for drawing a plough which here, unlike the ploughs of other countries is constructed to turn up the smallest quantity cf ground possible, instead of the greatest.

Method of cultivation.

In this, the cultivator seems to adopt every means within his grasp and puts in practice those devised by his forefathers, though limited the former and rude the latter. For rice crops, after his agreement with the zemindar, water is let in upon his land, and when sufficiently soft, it is ploughed and the weeds collected by the gorroo and the clods broken by the buckerhackana (both drawn by cattle): after this it receives a scanty supply of manure of cow-dung, leaves of the custard-apple tree and corinjee, it is then smoothed with the hand and sown either with the drill plough, or by broad casting ; the time occupied

from the commencement to the conclusion of these processes being fifteen days for the abee crops, ten for the poonas.

When the seed is put in, the water is allowed to run off, and the ground is merely kept moist until it has sprung up ; water is then turned on, and continues running until the harvest. Transplanting is not the general practice, and is adopted only to a very limited extent. During growth the fields are weeded three different times and in four months to four and a half, the crop is fit for the sickle, when reaped, it is stacked on the field, then trodden by oxen to separate the paddy from the straw, the former after winnowing which is performed by women throwing up the grain, or pouring it out of baskets held as high above the head as possible with their faces to the wind, is divided amongst those who have an invested interest in it and borne away: the latter is carted to the house of the cultivator ; before the ryot removes what is left to him, he sets apart what seed he thinks he shall require for his next operations, puts it into a basket made of straw well plaistered with cow-dung, and places it raised from the ground, in the driest part of his house.

It requires fifteen men or twenty women to reap one beegah in one day.

The dry crops.

The ground is prepared by three ploughings, the weeds collected, burnt, and the ashes scattered upon the land ; the seed is put in with the hand, after four months it is cut, eighteen inches of the stalk being left in the ground, and stacked, when the reaping is completed the heads are cut off the straw, and the grain trodden out by cattle, winnowed and removed in baskets to the house of the cultivator, the time of winnowing occupying fifteen days.

These two are the staple articles of food and obtain the greatest amount of attention. Muckka (Indian corn) is grown only round the houses of villagers and zemindars frequently exempt the house occupier from taxation upon it. The soil is prepared with the hand, and the seed put in by dibbling, the amount sown is very insignificant, but it helps to eke out the daily food of the proprietor at a season when other grain is scarce.

Tenure and occupation.

The tenures for rice lands are several; that in most general use is the sheirree hissa, when ground is granted to the cultivator being a meerasdar, and for abee crops, upon the agreement that from each candy of 20 maunds he will give eleven to the sircar; to khooshbash or strangers the zemindar receives only 8 maunds allowing the ryot to retain 12: for the thabee the same is observed, unless any thing should have occurred to render a separate agreement necessary. Land near tanks and villages is almost always cultivated under this cowl; for that at a distance from villages for the thabee two maunds in favour of the ryot is allowed.

The Nugdee Muckta,—Is a money agreement, settled before sowing and is generally 8 Rupees per beegah for one crop, this is not common, few ryots being able to meet the required payment, but is preferred by the wealthy.

Buttaee,—Is an agreement made after the grain has sprung up, in which the cultivator and zemindar share equally.

The Kailee Muckta,—Is had recourse to, when the ryot refuses to take half the produce, when an agent from the zemindar is deputed to measure it when reaped, and give half to the ryot.

The Bel Muckta,—Is a letting of land for a number of years, seldom under 10, at a fixed annual rent, which must be forthcoming whether produced or not. This however is a favourite cowl and when dependance can be placed on the good faith of the zemindar much benefit to the land is the result.

For dry crops or rubbee the nagur muckta is in general use, the zemindar determining the quantity of ground sufficient for one plough, and fixes the tax at from 2 to 3 rupees, according to its quality. For land unfavourable for any kind of produce no tax is levied upon either ploughs or measurement, the ryot making the best bargain he can for himself.

Such are the tenures upon which the ryots hold, and cultivate the soil, and if their portion of the fruits of their industry were subject to no further reduction than they are under the cowl commonly agreed upon, they would do well; but sacrifices are called for on

account of the general community, entailed upon them by a system which has existed for ages; sacrifices however they can scarcely be called, for some of the payments they are obliged to make in grain, are remuneration for labour as necessary to them as food, and consequently a money transaction would be required, instead of a mutual exchange of food for labour, and labour for food.

Thus, according to the sheiree hissa, eleven maunds are given from every candy to the zemindar: after he is satisfied, the putwarree receives 3 consoos; and the patail 3 more; then follow the village carpenter, and blacksmith, who receive one consoo each; the dhers get four, the dhobee, barber, soonkaree koomar, thalaree, mudam and brahmin proith four amongst them. The two first are village authorities and receive in consideration, the former for maintaining order, and the latter for keeping the general accounts. The carpenter and blacksmith, do all that is required as repairs to his agricultural implements; the dhobee and barber for administering to his personal comfort; the dhers for labour in his field; the koomar for supplying him with pots; the soonkaree measures his grain, and that of the zemindar. The thalaree and mudam, the former the watchman outside the village, the latter within, receive theirs as a subscription for the general good, while the brahmin proith keeps him in mind of the days of the week, feast days, and foretells the coming and cessation rain.

There seems nothing oppressive in this village system as it is called; its fault is that it prevents improvement; there is no inducement for a potter to turn out with additional labour, a more elegant water vessel than the one in present use, because were he to do so, it would not increase his claim upon the ryot, the carpenter and blacksmith for the same reason keep agricultural instruments in repair at the lowest rate possible, and fashion them originally in the roughest manner.

In money cowls the patail and putwarree receive one anna per rupee from the value of the produce.

Labour employed and its remuneration.

The agricultural labourers are chiefly Hindoos, it being but seldom that a Musselman considers himself called upon to exercise his powers in the field,

for the benefit of his household ; in the Racherla, Korutla and Polass Purgunnahs some do however, and work honestly and well ; of the Hindoos, the Koonbees, Moonoorwars, Gullawars, and Dhers follow husbandry as their means of livelihood ; the majority of Koonbees are ryots, labouring on their land and employing their poorer caste men. The Moonoorwars devote themselves entirely to this pursuit. Gullawars are a section of the shepherd caste who besides possessing cattle, labour as an additional means of subsistence. The Dhers are also willing to labour, but are not invited until those with more pretensions to sanctity are engaged. Women take their share of out-door work especially when crops are growing, the light labour of weeding and thinning being performed by them, they likewise assist in cutting and always winnow the grain ; they are all drawn from the Moonoorwars, Gullawars and Dhers, the wives of Koonbees never work in the field, but occupy themselves in domestic affairs, and are cleanly and industrious.

Men labourers are usually engaged from day to day and receive as remuneration, at the rate of two seers each of paddy per diem, when working in the rice fields ; and for dry-cultivation, one seer and a half of jooaree ; should they remain with their employers a full year, a cumlee and a pair of sandals is given to them, and sometimes a present of grain. In some Purgunnahs—there is a slight variation from what is here laid down—for instance in the Talook, Kutcoor, Nizambad and one or two others, the coolie instead of two seers of grain per diem gets one, with salt, onions and chillies, sufficient for a meal ; women are always paid in money and receive two pies a day.

Water Rivers.

The rivers of the Sircar are the Godavery, and Munar ; a minute description of the former from where it commences to form the Northern boundary of the Sircar, to the point it leaves it, is given in the Geographical Memoir, to which reference is made. It will be sufficient to notice here that its course is extremely tortuous, running with a general direction towards the East through the country for sixty-one and three quarter miles from Rampoorum to Thurmavarum, the distance between these places by the road being forty-seven miles, the average breadth

is half a mile, the bed extremely rocky, and the banks very high, particularly the right: towards the West it forms several islands, the largest being five and three-quarter miles in length, and one broad, and has two inhabited and one ruined village upon it, belonging to the Nandair Sircar; the stream is swift and, at Dhurumpooree, rapid succeeds rapid for the distance of a mile, the stream being broken by the increased slope of its bed and masses of rock projecting from it, these masses are not loose but part of the surface rock; as regards the navigability of the Godavery in its course through this Sircar, during nine months in the year these rapids must effectually prevent it, for any description of craft; in June, July and August the stream may be smooth, and there may be water sufficient, but its rapidity must require a high power to stem; the high banks are an impediment to irrigation and with the exception of one water-course, the river is not used as an adjuvant to cultivation. This water-course commences near the town of Vamulcoortee and for the three months the river is full, water flows abundantly, fills three tanks in the Vamulcoortee Purgunnah and is then allowed to run waste into a nullah.

A list of Villages where ferries are established and money collected is appended.

The Munar river although flowing but three months in the year is of much more value to the Sircar than the Godavery, as a great number of tanks are filled from it, and lands irrigated by it directly, without the intervention of tanks.

On entering the Sircar from Maiduc it is 120 yards wide, at the point it finally leaves it, 380; but when it first leaves it, to enter Ramghere previous to its forming the Northern boundary of the detached Purgunnah of Vejaghery and Velchal, it is half a mile; in this respect it is very variable, the bed is sandy and, throughout its whole course, is characterised by the number of its islands, and the lowness of its banks. It begins to fill at the setting in of the S.W. monsoon and continues to flow until November; in December water may still be obtained every where by digging, but the river is broken up into a number of pools. In its course, it is joined by several large nullahs which have their source in the first,

second, and south side of the third ranges of hills, and which flow through, and water the vallies separated by them. The first named the Rambudra nullah, falls in, one mile from Gumbeerowpett, it comes from the N. W. and waters that part of the Racherla Purgunnah, canals are cut to three tanks from it, and care bestowed to keep them open.

The Gungah nullah, arises near Ingul on the Western range, and after a course of 25 miles, falls into the Munar at Koodrapak; at Yamulwadah a dam of earth has been thrown across and a canal cut to the tank, but the latter has been allowed to fill up, and it is now almost useless.

The Mohedomada nullah arises in the Bhongeer Sircar, and has a Northerly course of 14 miles; the tank at Rainkoorta is filled from it; the Goondairoo flows S. E. from Nairella to Doorshed, a distance of 28 miles, it passes Podoor, Numlikondah and Rammuddagoo where canals are cut for irrigation but no tanks are filled from it. It is a broad sandy nullah with steep banks.

The Suly nullah waters the detached Purgunnahs of Velchal and Vejaghery, enters at Muddycoonta where it is joined by a large branch from Cherkoor, it runs past Pothgul and Velchal falls into the Munar four miles North of the latter; it has high banks, a sandy bed, and contains water during the greater part of the year.

The other nullahs arise from the North side of the Podoor range of hills, and the table land to the Westward. The largest called by the Natives Pedda Wagoo arises at Murreala, and after a serpentine course of 38 miles in a N. E. direction falls into the Godavery near Peddemuggadoo, it is joined by others during its course, and attains a breadth of 200 yards. There are no anicuts, and Korutla and Jylapoorum are the only places where small canals are cut to water lands. In the hot season this nullah is perfectly dry.

There is also a considerable nullah without a name commencing at the Juctial tank, and following Eastward by Polass, Kulada, and Chekulla, near which it crosses the boundary, and falls into the Godavery in the Ramghere Sircar; although the lowness of the banks of this nullah are highly favourable for cutting canals, yet

Kumbumpully is the only place where such has been done and there the land irrigated, only amounts to a few beegahs.

Tanks and Wells. The total number of tanks in the Sircar, is 3,120, and of these 665 are large, and 2,455 small; of the former 215 are out of repair, and of the latter 1,834, leaving 1,071 in good order. In speaking of a tank the zemindars are guided in their estimate of its size by the quantity of land it will irrigate in one year when full, so that a 300 beegah tank does not mean the superficial measurement of the tank itself, but that it will contain water sufficient for bringing 300 beegahs under cultivation; of the whole number of tanks only 9 are filled by channels opened to rivers or nullahs, of these there are in Racherla 3, Yellareddypett 1, Avonoor 1, Yamulcoortee 3, Yamulwadah 1, the remainder are dependant upon the rain which falls into them, or carried to them, by small channels cut from the surrounding lands.

The tanks of Yellareddypett (in the Jaghire of Hurry Dass) and Saniagarum are the largest in the Sircar, the former, it is computed, will hold water for 3,000 beegahs, the latter for 5, but the former is deprived of much of its usefulness from the circumstance of the channel which was cut from the river to fill it, passing through the lands of another zemindar, who supplies the wants of his own ryots first, and allows little to find its way to its proper destination.

There are 13,086 wells in this Sircar, 5,949 in repair, 7,137 out of order, that is the former are built up with stone from the rock in which they are sunk, in the latter this is only partial or neglected altogether. They are chiefly for supplying water for the use of the inhabitants. In addition to these there are 5,493 moats, from which water is drawn to irrigate gardens and rice lands. The means of irrigation then, are first by channels cut from rivers to supply land directly, secondly by tanks, thirdly by moats; the first system is most common along the banks of the Munnar, and can only be carried on during the wet season.

The tank water is never used until after the rains, unless a necessity arise for so doing, the supply is reserved for the tabee or late crop, the abee or early one, being raised by what falls upon the

land. Moats are used to irrigate all gardens, from pits sunk near them, and when tanks run low, irrigation is kept up by them from the same, dug in the most convenient position for the purpose.

Towns and Villages. The total of villages in the Sircar is 981, of which 197 are deserted; the number contained in each Purgunnah with the population of each is exhibited in the general table. The kusba of each Purgunnah is the village selected for the residence of the revenue officer and where he holds his cutchery, formerly the judicial head quarters was established in the town from which the Purgunnah derived its name, but from neglect in the Maramut Department, and other causes influencing an agricultural population, some of these have fallen to ruin and others nearly so.

Yelgunthul.—The capital is still the largest town in the Sircar and although other towns have decreased in population, that of this one has doubled within the last 20 years; it is situated on the left bank of the Munar river, in North Latitude 18° 25' 21" East Longitude 79° 4' 56" contains 884 houses and 4,376 inhabitants; the houses are kucha with tiled roofs, and built with some degree of regularity, the main street leads from the North to the South gate, these give ingress and egress to the inhabitants; portions of a mud wall which once partially surrounded, and connected the town with the fort remain, the greater part having been removed to make way for houses. The fort is elliptical in shape, built of granite and surrounded by a deep ditch which is filled by a covered channel from a tank, the wall is in good repair, and also the four square towers erected at equal distances upon it. From the centre of this enclosure rises an almost perpendicular granite rock 185 feet high, it is fortified with a low wall mounted with 8 large wrought iron guns, the only path to the top leads through several narrow archways, it is extremely steep and difficult of ascent. The buildings at the top are in ruins. A Kiladar with 25 men is in charge, upon a salary of 35 rupees a month; the revenue of the jaghere amounting to 3,705 rupees, granted for the purpose of keeping the fort in repair, is collected by a Naib and remitted to the city. A weekly fair is held on an open space between the fort and town when coarse cot-

ton cloths, cumlies, and vegetables are disposed of. With the exception of a small number of quilts there are no manufactured articles exported.

Juctial—Also a jaghere in the Purgunnah of Polass is the next town in size ; it is distant North of Yelgunthul 22 miles, contains 516 houses and 2,812 inhabitants; the streets are regular and the houses not crowded together as they usually are.

There are one hundred and twelve looms for the manufacture of fine and coarse cloths, the former amounting in the last year to 1,141 pieces of nine yards by one and quarter, valued at 10,141 rupees, were exported ; besides cloths Juctial sends a considerable quantity of slippers to the city market, which find a ready sale on account of the good quality of the leather. To the N.W. of the village at the distance of half a mile is the fort, octagonal in shape and about 200 yards in diameter, all the walls are of substantial material, the rivetment stone and chunam, the parapet brick and chunam, the counterscarp 14 feet in height, the escarp from 31 to 35 feet ; the ditch is deep and broad crossed on the N.W. side by two draw-bridges ; it is said to have been built 90 years ago by a Mussulman named Durrum Sahib, who had a French engineer under him. It is kept in repair at a cost of about 3,000 rupees annually, and garrisoned by a Killadar and 210 men. Juctial is the Kusba of the Thevecondah and Polass Purgunnahs, as the Talookdar of these districts holds it in jaghere. Thevecondah is in ruins and the small town of Polass has been separated from the Purgunnah as Agrarum.

Gumberowpett—The kusba of the Racherla Purgunnah is a large village 76 miles West of Yelgunthul ; it has 505 houses and a population of 2,405 chiefly employed in agriculture.

Of Racherla not one house remains; traces of a fort and ruined mosque are all that mark its former site. The people in the neighbourhood attribute its desertion to the unhealthiness of the locality, but there is nothing to bear out this assertion, a more likely cause is found in the fact of there being two broken bunds of tanks in its immediate vicinity ; these tanks formerly irrigated a

large extent of rice land which is now overgrown with jungle, the people having forsaken the town for other villages more favorably circumstanced for agricultural pursuits.

Korutlah—The kusba of the Purgunnah of that name, is situated N.W. of Yelgunthul 39 miles on the left bank of the Peddavagoo, a ruined wall partly surrounds the town which contains 424 houses and 2,157 inhabitants; it has no pretension to regularity in the arrangement of its streets, nor to cleanliness. Coarse writing paper is manufactured here and sent to the city and Jaulnah for sale, 12 mills giving employment to 74 people are kept in pretty constant work. The quantity produced last year was 864 reams valued at 2,239 rupees and 12 annas. It is the only town in the Sircar where paper is made; an inferior description of cotton cloth is woven and exposed for sale at the weekly fair and occasionally sent to other markets, 760 pieces the production of 31 looms was the extent to which this branch of industry was carried during the last year, their aggregate value being 4,560 rupees.

Sircilla—In the Havalee Purgunnah is a large town with 464 houses and 2,267 inhabitants; it is distant to the Westward of Yelgunthul 32¼ miles, the population are chiefly agricultural, but cumlies and coarse cloths are made to a limited extent. The town is built upon very broken ground and is irregular in consequence. It contains bazars and a small ruined ghurry.

Moncondoor—Is perhaps the most flourishing town in the Sircar, it is situated in the Havalee Purgunnah 9¾ miles S.E. of Yelgunthul, is surrounded by a ditch, and wall now in ruins, and has a large stone ghurry. Twenty years ago it contained 100 houses, it now numbers 421 with a population of 2,224; there are 22 looms for the manufacture of coarse cloths.

Kurreem Nuggur—Is the kusba of the Havalee Purgunnah and where the Sudder Naib resides; it is 6¾ miles to the East of Yelgunthul on the left bank of the Munar, contains 202 houses and 988 inhabitants; the finest rice grown in the Sircar is raised in its vicinity, and sent to the city market.

Metpully—Is the kusba of the Velloolah Purgunnah; it is 40 miles to the N.W. of Yelgunthul, contains 861 houses and 3,096

inhabitants. This town is clean, dry and well situated on high, open ground; formerly large quantities of cloth and paper were manufactured, but that of the latter has ceased entirely, and the former made only to supply its own market.

Jummicoonta—Is the chief town and kusba of the detached Purgunnah of Vegiaghery and Velchal, distant 20 miles due East from Yelgunthul; it has 225 houses and 1,112 inhabitants. There are two looms for the manufacture of carpets at the village of Veenavunka, and these are the only two for that purpose in the Sircar.

Such are the chief towns in the Sircar. The remaining villages from which Purgunnahs have been named are either small or deserted.

Yamulwadda—Is a considerable village on the left bank of the Gunga nullah in Havalee Purgunnah; has 2,909 inhabitants of whom 642 are Brahmins who hold the town in jaghere; they have no records to show when the grant was originally decreed, the whole having been lost by fire which nearly destroyed the town 40 years ago.

Another deed has been obtained from the Dewan Muneer-Ool-Moolk Bahadoor to the following effect:

"To all Deshmooks, Sir Desh Pondias, Despondias, Revenue Officers, Accountants, Ryots, Labourers, &c., in the Havalee Purgunnah of Yelgunthul Sircar in the country of Hydrabad here."

"The village of Yamulwadda in the aforesaid Purgunnahs with property, and Sayer, and Mothurpha, and Kullale, also taxes on feasts of the temple, all gardens, trees, &c., all and several of these from the beginning of the year 1225 Fuslee are given to one and all of the Brahmins residing in the aforesaid village without mentioning particular names, or shares, to themselves and their heirs for ever; and also to defray the expenses of the Pooja at the temple."

It is therefore necessary that all people knowing this, should allow the aforesaid Brahmins to have their lawful property at the proper season, and considering this as their authority act accordingly.

Given on the 15th day of Saubon 1230. The property thus conveyed to them has been divided equally between 200 families, the affairs of the community being managed by three of the descendants of the Somiajooloo who at first made the distribution; lapses of

shares from families becoming extinct seldom happen, when such occurs, selection is made from the Kooshbash Brahmins by the Somiajooloo. The fees received at the Temples amount to more than its expenses, the surplus being portioned out to those chosen to officiate in them; annually a certain number depart in search of charity, returning after some months and adding a portion of the proceeds to the general stock. The Brahmins do not live unmolested, the zemindar has contrived to fix (notwithstanding the royal instrument of the Dewan) an annual fee of 700 rupees as roosum, an acknowledgment of his hereditary right of proprietorship. The Naibs also are constantly at work with exactions of some kind or other. The temples are small and without ornament and are falling to decay. To the Appendix has been added a statement of receipts and disbursements for the temple for one year exclusive of the revenue derived from land, 2,397 beegahs of which belong to the Jaghere.

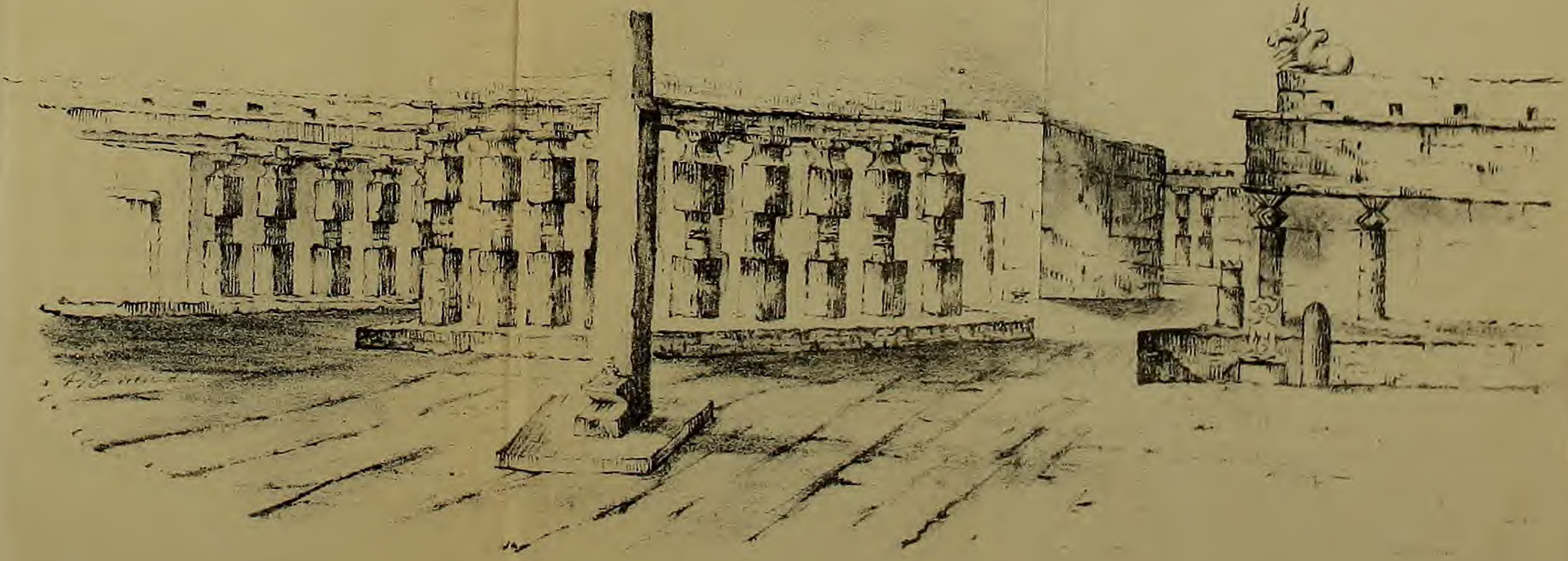
The Agrarums of Thurumpoory, Polass and Thurmarrum are maintained in a similar manner to that of Yamulwadda.

Population.

The total of population is 1,75,267, the General Table exhibits the number and description of both sexes, in each Purgunnah, together with their several employments. It is necessary to mention here as connected with the following Tables that of the 2755·4 square miles the area of Sircar; 1936.5 miles are incapable of cultivation.

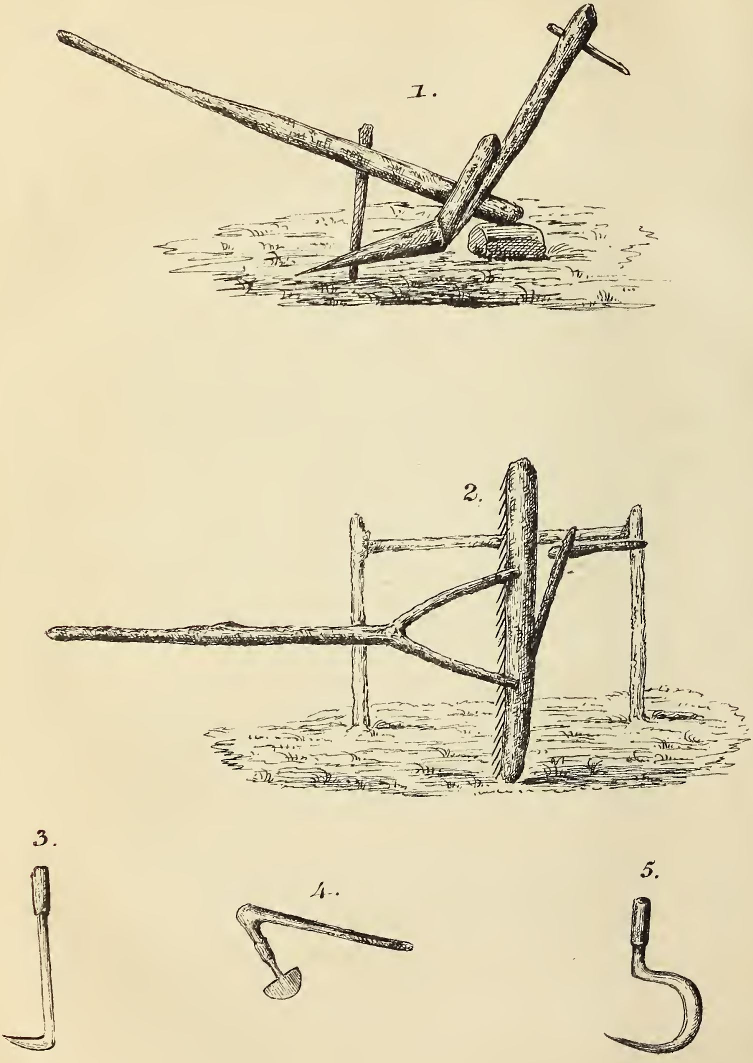
TABLE *showing the number of square miles in the Sircar, the population, the number of inhabited houses, the population per square mile, with the number of persons to each house.*

Square Miles.	Population.				Houses inhabited.	Population per square mile.	Number of persons corresponding to each house.
	Males.	Females.	Children under 10 years.	Total.			
2755·4	58,842	61,375	55,050	1,75,267	37,297	63.61	4.69



Temple at Uunalwadda
Sircar Yelgunthul

Agricultural Instruments.



1. *Nagur*
2. *Goroo*
3. *Kurrara*
4. *Puvra*
5. *Korully*

Sinclair Lith.

TABLE *showing the number of each description of Population.*

Description of People.	Houses.	Males.	Females.	Children under 10 years.	Total.
Cultivators, - - -	11,566	18,845	19,483	17,093	55,421
Shopkeepers, - -	5,680	9,540	9,984	8,893	28,417
Weavers, - - - -	4,776	7,250	7,647	7,572	22,469
Meerasdars, - - -	10,198	15,991	16,489	15,432	47,912
Bearers, Peons and Religious Beggars,	5,077	7,216	7,772	6,060	21,048

The cultivators may be divided into three classes, viz., those who possess land but do not labour, and those who rent land and labour upon it, and again those who neither possess nor rent land, but who live solely by labour. Of these we have of both sexes belonging to the first 976, to the second 32,213, and to the third 5,139.

Meerasdars comprise all those employed under the village system who, generally, in addition to their claim upon the ryots, have a small patrimony near the villages in which they reside.

The following Table shows the number of People in each division of the Population as recognized by the Government.

Description of People.	Houses.	Males.	Females.	Children under 10 years.	Total.
Meerasdars, - - -	10,198	15,991	16,489	15,432	47,912
Ryots, - - - - -	9,807	16,343	16,846	14,727	47,916
Moturpha, - - -	10,456	16,790	17,631	16,465	50,886
Kooshbash, - - - -	6,836	9,718	10,409	8,426	28,553

The Moturpha (Shopkeepers and Weavers) are the only class who pay house tax.

TABLE *showing the proportion of Hindoos and Mahomedans.*

Description of People.	Houses.	Males.	Females.	Children under 10 years.	Total.
Hindoos, - - - -	36,250	57,227	59,600	54,056	1,70,883
Mahomedans, - - -	1,047	1,615	1,775	994	4,384

Whether any decrease in the number of the population has actually taken place, there is nothing upon which to form a correct report, the almost universal reply by village authorities, when questioned on this subject, describes it as diminishing: however this may be, there is certainly nothing to invite or attract an influx of strangers; for through Kooshbash get land upon more favourable terms, the wants of the zemindars render them nominal, the ruined villages and broken tanks are evidence of decrease in agriculture; and such can scarcely happen, without a decrease of people, in a community where there is little or no trade in manufactured articles. People seldom leave their villages without great provocation, and should they do so, it is only to remove to one belonging to the neighbouring zemindar, so that the population of a large district would not be numerically influenced thereby, the social condition of the ryots may have more influence, pressed as they are with demands, they live upon as little expense of labour and food as possible, the want of confidence universally existing in the good faith of the zemindars prevents that wholesome exertion necessary for the realization of property, and its attendant benefits; so that, the tendency is generally either backwards, or to remain in a state of apathetic listlessness badly clothed and half fed. Disease, especially small pox, must have great effect in retarding the growth of the population; every three or four years a visitation from this scourge is expected, and in the absence of all preventive or sanitory measures, is the cause of great mortality. In the village of Alleoporum, in the Vempully Purgunnah, out of a population of 436 it is stated that 85 died in 4 months from that cause alone. Cholera breaks out once in 8 or 10 years. Intermittent fevers prevail in the Northern Purgunnahs during the cold season, and to a more limited extent in the South, but the mortality from this disease is not great.

Education.

The number of schools is 52, one to every 15 villages; the number of scholars 1,352, or one to every 130 of the population. Teloogoo (for there are no Persian

schoolmasters) is the language taught, and that to a very limited extent; the keeping of accounts is the main object to be acquired, and when this is accomplished, education is considered complete, although the scholar may not be able to read an ordinary manuscript. The sons of Bunniahs, and the village Putwaries and Patails are all who seek instruction. The village system is probably to blame here. The official offices being hereditary; there is nothing tangible to reward the exertions of additional study in other sections of the people, not Meerasdars.

The returns obtained on the state of crime afford no correct information, and are consequently omitted. Every Thalookdar has a Cazee to whom is assigned the duty of awarding punishments; in serious offences the judgment is forwarded by the Naib for the approval of the Thalookdar, who gets it confirmed or otherwise by the Mahkama Adalut before it is carried into execution. All offences are punished by fines or imprisonment.

Police.

The police establishments are of two kinds, one maintained at the expense of the ryots, the other by the state. The first are the Thalaries or village watchmen and are under the Zemindar, they report all that occurs to the authorities, and watch the grain fields and the inhabitants both by day and night; although a house tax and town duty are collected, neither are applied to the payment of these men.

The second are engaged by the Thalookdar and serve for both police and revenue purposes, they receive prisoners from the village authorities, and have the custody of them before and after sentence has been passed. These are under the Naibs.

Manufactures.

These consist of fine and coarse cotton cloths, tusser, cumlies and paper; in almost every village sufficient coarse cloth is made for the supply of its own people. In some, manufactures are extended for exportation. In the whole Sircar there are 3,808 looms, of these 3,391 are for fine and coarse cotton cloths, 396 for cumlies, 19 for tusser silk, and 2 for carpets.

The quantity and value of the Articles manufactured annually may be thus exhibited.

Articles.	Quantity.	Value.		
		Rs.	As.	P.
Cotton Cloths, - -	28,770 Pieces, - - - -	2,14,161	3	11
Paper, - - -	864 Reams, - - - -	2,239	12	0
Cumlies, - - -	19,920 Pieces, - - - -	7,470	0	0
Tusser, - - -	386 Pieces, - - - -	1,630	0	0
	Total Rupees..	2,25,500	15	11

The trade in manufactured goods is entirely in the hands of Bunniahs, who, by a system of advances, keep the labour of the weavers at their disposal, and let the quality of the article be a silk sarree, or a common cumlie, the remuneration to the operative is the same ;—no official records are kept to show the quantity of exports and imports, and from the amount of town duty alone, a correct estimate cannot be formed, because an imported or exported article in its transit within the Sircar pays duty on entering every talook, consequently it may have been taxed two or three times before it reaches its market, or quits the district, and any conclusions drawn from the duty paid upon any one article in any talook would therefore be erroneous. The sayer or town duty is raised chiefly from the exportation of rice, ghee, cloths and paper, and the importation of salt, but the quantity of each commodity or the amount derived from each cannot be shown.

The villages in which iron is manufactured have been mentioned, but it is difficult to determine accurately the extent to which smelting is carried ; the furnaces are not kept constantly at work, but only when there is a demand, and that is by no means steady. The best market is Konasamudrum in the Nandair Sircar, where the famous steel is made.

The allowance paid by the manufacturer to the zemindar is one Rupee per month, let the amount of ore collected be what it may.

Coins. The coins are the Halee Sicca, and Govind-Buksh Rupees, and copper Pice. The Gundah is a designation equal to 4 Pice, but there is no such coin.

1 Halee Sicca,	=	64 Pice.
1 Govind-Buksh,	=	63 Pice.

The high price of the Halee Sicca is a source of considerable profit to the Bunniahs and Soucars, who send large quantities of copper coin to Hyderabad for the purpose of purchasing this Rupee, which, there, is only worth 60 Pice, and get remittances by bills upon the Naib.

Weights and Measures.

Superficial Measure.

2 Cubits,	=	1 Guz.
16 Guz,	=	1 Putta.
10 Puttas,	=	1 Side of Beegah.
1 Beegah,	=	6,400 Square Yards.

Weights for Grain.

80 Pice,	=	1 Seer.
$2\frac{3}{4}$ Seers,	=	1 Pylee.
2 Pylees,	=	1 Consoo.
8 Consoos,	=	1 Maund.
20 Maunds,	=	1 Candy.

Silver and Metal Weight.

4 Goomchees (seed of the Abrus Precatorius,)	=	1 Chinnum.
2 Chinnums,	=	1 Mosha.
12 Moshas,	=	1 Tola.
24 Tolas,	=	1 Seer.
5 Seers,	=	1 Tukree.
8 Tukrees.	=	1 Maund.
20 Maunds,	=	1 Candy.

Mode of Transit and Communication. The mode of transit is by carts and bullocks, the former the property of the Bunniahs, the latter the Brinjaries. There is a good road for both leading from Hyderabad through Saniagarum to Yelgunthul and

North to Juctial and Thurumpooree ; this is joined by one from Yamulcoortee, Metpully and Korutla ; another from Yelgunthul to Gurrapully in the direction of Chennoor, one from Yelgunthul to Gumbeerowpett by Yamulwadda, and Sircilla ; there is also one from Sircilla to Hyderabad by Siddeepett, all these roads are open for traffic throughout the year. Communication with Hyderabad by letter is kept up by Hurkaras, public letters are carried within the Sircar by Dhers who relieve each other at the successive village on the way.

Sources of Revenue.

These are the assessment on land, the sayer or tax on goods during transit, the kullall or tax upon the drawer of toddy and distiller of arrack, and the moturpha or tax upon looms, shops, &c. The assessment upon khalsa lands amounts to Rs. 2,74,559-15-6, which sum has to be provided by the Zemindars and paid to the Naibs for transmission to the Talookdars ; it will be seen on reference to the abstract appended that for the year under consideration Rs. 2,36,990-1-8 was the sum realized under the head land revenue, the deficiency when Zemindars have not sufficient influence to obtain a remission, is provided for from private resources or increased exactions. The sayer and kullalee are let by contract and produced Rs. 49,853-3-10. The moturpha is paid to the Naibs, and amounted to Rs. 8,580-6-11, thus showing with the seivae jumma which is made up of fines, taxes on fruit trees, marriages and processions, a total of Rs. 300,407-8-8 as realized from all sources during the year. The jagheres produced to their holders from similar sources Rs. 53,689-14-3 ; the whole of this sum cannot be said to be entirely withdrawn from the state revenues, as some grants have been made as payment for services in the act of performance, such as that of Lingapoor where the revenues of seven villages are assigned for the Tahreer of the Duftarwallahs, then again of Juctial, Yelgunthul, and Codeemaul, for the repairs of their respective forts and support of the garrison ; there are in all eleven jagheres of which four are gifts to Brahmins, four granted in consideration of the performance of certain works, and three alienated as rewards for services rendered.

Mode of Collection. The revenue is collected by three instalments at intervals of four months, the accounts are rendered by the Vakeels of the several Zemindars to the head Sheristadar, who settles them with the head Peshcar, who gives receipts signed by the Naib, the establishment for collecting the revenue excluding the pay of the troops amounts to 12,126 rupees or a little more than 4 per cent.

The appointment of revenue officers to each Purgunnah no longer obtains, the boundary of every Purgunnah is known and Patails and Putwarries exist as formerly, but a Peshcar upon 15 rupees a month is now frequently responsible for the collection of one or even two Purgunnahs.

The number of men serving as sepoys amounts to 585, of those 235 are employed under the Keladars of Yelgunthul and Juctial and 350 under the Naibs for police and revenue purposes, each receives three rupees and a half monthly.

THOS. L. BELL, *Surgeon,*
3d Nizam's Cavalry. On Special Duty.

Sayer Customs paid at Sircar Yelgunthul.

	R.	A.	P.
Jooaree, Moongh, Thoor, Coolthee, Lobya, Oored, Green Chillies, Onions, Tamarind, Moha, Chenna, Mussoor, Chenna Dholl, Mukkoo Jooaree—if pass through the Havalee Purgunnah pay for every 10 bullocks load,	4	0	0
If the above articles are brought by the Mullungoor road, per 120 bullocks load,	4	0	0
If brought from Mullungoor to Sircilla, per 120 bullocks load,	4	0	0

Article	Particulars	Rs.	A.	P.
	If the people of Yelgunthul Sircar take the above articles to Hyderabad pay per bullock load, - - -	0	1	9
	If they take them through Havalee pay per bullock load, -	0	1	3
	If taken from Moostoolapoorum to Siddeepett, pay per bullock load, - - - - -	0	1	3
Till, Saffron, Rice, Fenugreek Seeds, Mohwa, Coriander, White Thoor, Tamarind, Dholl—if taken over the pass, per bullock load, -		0	3	0
	When taken by other roads, per bullock load, - -	0	2	3
	If the above articles are taken over the pass to Hyderabad by Brinjaries, per 110 bullocks load, - - -	8	0	0
	Salt—if brought to Yelgunthul or taken to Hyderabad by Bunniahs, per 10 bullocks load, - - -	1	14	0
Salt,	If brought from Purgunnahs Husnabad, Rajgopalpett or Guzvale by the Brinjaries, for every 110 bullocks load, - - -	18	0	0
Do.	If pass through the roads of Hunthagherry or Sircilla for 110 bullocks load, - -	6	0	0
Cattle,	If purchased from Yelgunthul Sircar and taken to Hyderabad, for every 10 heads, -	1	0	0
Do.	If taken from Mullungoor to Hyderabad through Moostoolapoorum, Havalee, Hunthagherry and other places, for every 10 heads, - - - - -	0	12	0
Sheep,	If purchased from Yelgunthul Sircar and taken to Hyderabad, for every 115 heads, -	4	0	0
Do.	If taken to Hyderabad from other places through Yelgunthul Sircar, for every 115 heads, - - - -	3	0	0
Steel and Iron,	If taken through the Yelgunthul Sircar, per bullock load, - - - -	0	9	0
Ghee, Castor Oil, Sweet Oil, Tobacco, Bang, Cotton, Goor, Cocoanuts, Suparree, Black Pepper, Spices, Dates, Chillies, Honey, Paper, Bangles, &c.	If exported by the people of Yelgunthul, per bullock load, - - - -	1	2	0
	If imported from Purgunnahs, Guzvale and Siddeepett, per bullock load, - -	0	12	0
	If taken from Mullungoor through Unthagherry and Siddeepett, per bullock load, -	0	8	0
	If taken through the Havalee, per bullock load, - - - -	0	8	0
	If taken from Havalee by Unthagherry road, touching to Ulleepoorum, per bullock load,	0	6	0

		Rs.	A.	P.
Paddy, &c. Samah, &c.	If taken by the people of Yelgunthul pay for every 110 bullocks load, - - -	6	4	0
Paddy, Samah, &c.	If taken by the people of the Sircar and pass through the Yelgunthul Sircar, for every 10 bullocks load, - - - -	0	6	9
Do.	If taken in abundance by the Brinjarries or other people, for every 125 bullocks load,	3	0	0
Cloth,	If taken to Hyderabad from Yelgunthul Sircar, per bundle, - - - -	0	13	0
Do.	If taken to Hyderabad by the people of Koyada, per bullock load, - - -	0	6	0
Young Bullocks,	If brought from Mullangoor Sircar and taken through Ananthagherry, for every 10 heads,	1	8	0
Do.	If brought from Husnabad Purgunnah and pass through the Havalee, for every 10 heads, - - - - -	0	10	0
Do.	If purchased and taken by the people of Yelgunthul to Hyderabad, per each, - -	0	2	0
Silk Sarries,	If sold in Yelgunthul, per piece, - -	0	1	0
Silk Cholies,	Do. do. per do. - -	0	0	6
Copper, Tin, &c.	If brought and sold at Yelgunthul, per bullock load, - - - - -	1	8	0
Hemp,	- - per bullock load,	0	4	6
Pawn,	- - - per bundle, -	0	9	0
Ginger,	- - per bullock load,	0	7	6
Wood,	- - - per cart, -	0	2	3
Gunny Bags,	- - per bullock load,	0	6	0
Indigo,	- - - per do. -	7	8	0
Opium,	- - per chest of 6 seers,	3	0	0
Sugar-candy,	- - - per bullock load, -	1	14	0
Bangle, Stone,	- - per do.	0	12	0
Bangle, Ashes,	- - - per do. -	0	3	9
Lac,	- - per do.	1	0	0
Bees Wax,	- - - per do. -	0	10	0
Cumlies,	- - per bundle of 40 pieces,	0	9	0

Taxes on Articles brought in from the other side of the Mangeera River and sold in the Yelgunthul Sircar.

	Rs.	A.	P.
Cloth, per bundle of 30 to 40 pieces, - - - -	1	8	0
Cotton, - per bale, -	0	10	0
Ghee, - - - - -			
Oil, - - - - - -			
Tobacco, - - - -			
Chillies, - - -	0	10	0
Goor, - - - - - -			
Cocoanut, - -			
Dates, per bullock load,			

	Rs.	A.	P.
Sugar, - - - -			
Cheronjee, - - -			
Coarse Paper, - -			
Lac, - - -			
Bees Wax, - - -	0	10	0
Lead, - - -			
Tin, - - - -			
Pewter, - - -			
Brass, &c. &c., per bullock load, - -			

(Ghee to Dates bracketed together at 0 10 0; Sugar to Brass bracketed together at 0 10 0.)

	Rs.	A.	P.
Copper, - - -			
Iron, - - -	0	10	0
Steel, &c. &c. per bullock load, - -			
Thill, - - - -			
Moha, - - -			
Rice, - - - -			
Gallnuts, - -			
Dhall, - - -	0	3	0
Tamarind, - -			
Thoor, - - -			
Moongh, - -			
Salt, per bullock load,			
Do. if brought by Brinjarries, per bullock load,	0	2	0
Garlic, - - per do. -	0	9	0
Saffron, - - per do.	0	8	0
Onions, - - per do. -	0	1	6
Horse Shoes, - per do.	0	12	0
Fenugreek Seed, per do. -	0	4	0
Saltpetre, per do.	0	9	0
Iron Filings, per do. -	0	9	0
Green Ginger, per do.	0	6	0
Cloves, per maund, -	0	12	0
Sheep, per 100,	3	0	0
Other Cattle, per do. -	12	0	0
Tussur, per bullock load,	4	0	0

	Rs.	A.	P.
Indigo, per bullock load, -	3	6	0
Bamboo, per do.	0	2	3
Bangles, per do. -	0	12	0
Peas, per do.	0	2	0
Tamarind with seeds, do. -	0	1	6
Black Pepper and Dried Ginger, per bullock load,	0	12	0
Pawn, per do. -	0	4	6
Chenna, per do.	0	3	0
Green Chillies, per do. -	0	1	6
Gunny Bags, per do.	0	3	0
Opium, per chest of 6 seers,	2	4	0
Sugar-candy, per bullock load, - - -	0	15	0
Silk Sarree, per piece, -	0	1	6
Do. Cholie, per do.	0	0	9
Marking Nut Seeds, per bullock load, - -	0	6	0
Do. Fruit, per do.	0	1	6
Mudder Bark, per do. -	0	6	0
Cumlies, per bundle,	0	12	0
Foreign Silk, per maund -	1	0	0
Good do. per do.	1	8	0
Hemp, per bullock load, -	0	4	6
Grain of all sorts, per 120 bullocks load, - -	9	6	0
Paddy, per do. do.	6	4	0

Taxes on Articles brought in and sold in the Pettahs of Kurreem Nugger, Mauncondoor, Yamulwadda, Assuff Nuggur, and Yelgunthul from the Ramgheer and Mullangoor Sircar.

	Rs.	A.	P.
Saffron, - - -			
Castor Oil Seeds, -			
Oil, - - - -			
Cumlies, - - -	0	12	0
Iron, - - - -			
Buckets for Moats, &c., per bullock load, -			
Foreign Silk, per maund,	1	0	0
Cotton, - - -			
Ghee, - - - -			
Suparee, - - -	1	8	0
Sugar, - - -			
Chillies, - - -			
Sugar-candy, - -			

	Rs.	A.	P.
Hemp, - - -			
Thill, - - -			
Rice, - - -			
Peas, - - -			
Moha, - - -	0	4	6
Tamarind, - -			
Gallnuts, - - -			
Salt, - - -			
Wheat Flour, &c., per bullock load, - -			
Gunnies, - - -			
Fenugreek Seeds, -	0	9	0
Plough Irons, - -			
Pawn, - - -			

	Rs.	A.	P.
Brass, &c. - Coosoomba Flour, per bullock load, -	1	8	0
Tobacco, - - - Stone Cups, - - Country Paper, - - Steel, &c., per bullock load,	1	2	0
Oil Cake, per do. -	0	1	6
Frankincense, per do. -	1	8	0
Sheep, per 100, -	6	0	0
Cloth, per bundle of 30 to 40 Pieces, - -	4	8	0
Jooaree, - - - Thoor, - - - - Moongh, - - - Chenna, - - - Coolthy, - - - Beans, - - - Mussoor, - - Wheat, &c., per bullock load, - - -	0	1	0

	Rs.	A.	P.
Garlic, &c., per bullock load, - - - -	0	9	0
Salt, - - - Dried Ginger, per do. -	0	7	6
Goor, - - per do. -	0	15	0
Bamboos, - per do. -	0	2	3
Tussur, - per bundle,	4	8	0
Raw Silk, per bullock load,	10	8	0
Onion, - per do. -	0	2	0
Green Chillies, per do. -	0	3	3
Paddy, - - - Samah, per bullock load,	0	0	9
Salt, brought by Brinjarries, per 150 bullocks load at Assuff Nuggur and Yamalwadda,	0	4	0
Salt, brought by Brinjarries, per bullock load, at Kurreem Nuggur and Mauncondoor,	0	2	3

Taxes on Articles brought from Ramgheer and Mullangoor Sircars, and sold in the Villages of Yelgunthul Sircar.

	Rs.	A.	P.
Cloth, per bundle of 30 to 40 pieces from the people of Mauncondoor, - - -	2	8	0
Do. from the people of Kothapullee, - -	3	7	0
Do. from Bunniahs, -	3	6	0
Tin, per bullock load, -	0	9	0
Foreign Silk, per maund,	1	8	0
Raw Silk, - per do. -	2	0	0
Hemp, per bullock load,	0	9	0
Gunny Bags, - per do. -	0	6	0
Onions, - - per do. -	0	2	3
Cotton, - - - Ghee, - - - Oil, - - - - Tobacco, - - - Goor, - - - - Cocoanuts, - - Dates, - - - Bangles, - - Dried Ginger, - - Black Pepper, - Suparee, - - - Chillies, - - - Sugar, - - - - Marking Nuts, per bullock load, - -	1	0	0

	Rs.	A.	P.
Cheronjee, - Lead, Lac, per bullock load, - - -	1	0	0
Salt, if brought by Brinjarries, per bullock load,	0	2	3
Young Bullocks, per each,	0	3	6
Full grown do. per do. -	0	4	0
Frankincence, per maund,	1	8	0
Jooaree, - - Moongh, - - - Thoor, - - - Coolthy, - - - Bobur Oord, - - Tobacco, - - - Moha, - - - Seeds, - - - Chenna, - - - Peas, per bullock load,	0	2	0
The above if brought by Brinjarries, per 110 bullocks load, -	9	6	0
Paddy, - - - Samah, - - - Kungonee, &c., 120 bullocks load, - - -	6	4	0
Cumlies, per bundle of 40 Pieces, - - -	1	2	0

List of the most important spontaneous Vegetable Productions in the Sircar Yelgunthul.

Tectona Grandis, - - -	Too small to afford good timber.
Dalbergia Latifolia, - -	Is very small and seldom cut.
Bassia Latifolia, - - -	Very plentiful, but the flower distilled only in the two Northern Purgunnahs.
Butea Frondosa, - - -	Grows in all parts of the Sircar; an infusion of the flowers is sometimes used to dye cotton a bright yellow.
Conocarpus Latifolia Mimosa Xylocarpus, - -	The wood of both used for making agricultural instruments.
Gardenia Dumetorum, -	Pounded seed used as emetic.
Phylanthus Emblica, - -	Much used as an expectorant.
Ficus Racemosa, - -	Bark used as an astringent.
Calotropis Gigantea, - -	The juice much used in skin diseases.
Soymeda Febrifuga, - -	Has febrifugal and antiseptic properties.
Abrus Precatorius, - - -	An infusion of the seeds used as a diluent.
Mucuna Pruriens, - -	Used as an anthelmintic.
Justitia Paniculata, - -	Much employed as a tonic and stomachic.
Feronia Elephantum, -	Yields a gum used as an astringent.
Ficus Indica & Ficus Religiosa,	Bark used as a tonic.
Cassia Fistula, - - -	Pulp of seeds used as purgative.
Cassia Auriculata, - -	The dried powder of the seeds used in ophthalmia.
Hyperanthera Moringha, -	Green root employed as a stimulant.
Terminalia Chebula and Terminalia Bellerica, - -	The dried fruit of both used as an astringent, that of T. C. is the most powerful.
Melia Azadirachta, - -	The infusion of the bark as well as its powder is considered a valuable tonic.
Webera Tetrandra, - -	The bark used in dysenteric complaints.
Ocimum Basilicum, - -	An infusion of the seeds used in nephritic affections.

A List of Villages on the banks of the Gungah and Godavery where Ferries are established and money collected.

In Purgunnah Vempullee 3 villages, viz., Goomeral, Donechund, Balloocondah and Boenapullee—as follows:

		Rs.	A.	P.
Men, - - - - -	each - -	0	1	0
Horse, - - - -	do. -	0	2	0
Bullock, - - - -	do. - -	1	2	0
Grain of all sorts, - - -	per candy, -	1	8	0
Carts with Teak Timber, - -	each - -	0	12	0
Do. with small do. - -	do. -	0	10	0
Do. with smaller do. - - -	do. - -	0	8	0
Empty Carts, - - - - -	do. -	0	4	0
Bullocks with Teak Wood, - -	per 100, - -	3	12	0

In Purgunnah Hursecottah 3 Villages, viz., Rungasagur, Kumnoor and Dhontapoorem—as follows:

		Rs.	A.	P.
Men, - - - - -	each -	0	0	9
Cattle, - - - - -	do.	0	1	0
Small Village Carts (empty), - -	do. -	0	1	6
Bullocks loaded with Teak Wood, Grain, &c.,	per 100,	2	0	0

Receipts of the Jaghere of Yamulwadda exclusive of Land Revenue.

	Per Year.			Total.		
	Rs.	A.	P.	Rs.	A.	P.
Kullal contract at the rate of 106 Rs. monthly, .	1,272	0	0	1,272	0	0
Paid by Bunniahs, at Rs. $11\frac{1}{4}$ per mensem,	135	0	0			
,, by Goldsmiths, at Rs. 4 per do. .	48	0	0			
,, by Weavers, at Rs. $3\frac{1}{2}$ per do.	42	0	0			
,, by Tobacconists, at Rs. 3 per do. .	36	0	0			
,, by Tailors, at Rs. $1\frac{1}{4}$ per do.	15	0	0			
,, by Butchers, at As. 8 per do. .	6	0	0			
,, by Painters, at As. 8 per do.	6	0	0			
,, by Bangle dealers, at As. 4 per do. .	3	0	0			
,, by Shoe makers, at As. 4 per do.	3	0	0			
,, by Cotton beaters, at Rs. $1\frac{3}{4}$ per do. .	21	0	0			
,, by Vegetable sellers, at As. 4 per do.	3	0	0			
,, by Oil sellers, at Rs. 14 per do. .	168	0	0			
				501	0	0
Collection of Transit duties at the rate of Rs. 14 per mensem, ...	168	0	0			
Paid by Bunniahs for articles purchased, .	295	4	0			
				463	4	0
Paid by the visitors of the Temples, . . .	....			1,026	14	3
Grand Total..				3,263	2	3

The above sum is distributed as follows :

FOR RAJESHWUR SAMY'S TEMPLE.

9 Candies and 18 Maunds Paddy at 20 Rs. per Candy, ...	198	0	0			
6 Candies and 18 Maunds Oil, at 17 Rs. per Maund, ...	217	0	0			
Salt, Chillies and Dholl, &c.	142	0	0			
Bheemanah Dea's Poojah, ...	18	0	0			
For Brahmin's Almanac, ...	7	10	3			
For Gopal Samy's Poojah, &c. . . .	23	0	0			
Sree Ramachunder's Day, ...	11	8	0			
For 9 days' Poojah in April, ...	19	5	3			
,, Dusarah Expenses, ...	42	8	0			
,, Deepavalee Feast, ...	8	12	0			
,, Fire Poojah in August, ...	4	4	0			
,, Kristna Samy's Birth-day, . . .	6	0	0			
,, Full Moon Poojah, once in four months,	2	6	6			
,, Sarree Cholee, &c. &c., for Davee, . .	7	8	0			
				707	14	0
,, Mootsuddees, &c., in the temples, at 20 Rs. per month, ...	240	0	0			
,, Jowans, &c., in the temple, at 29 Rs. per do.	357	0	0			
,, The Darogah of the temples, . . .	180	0	0			
				777	0	0
Carried over.	....			1484	14	0

	Rs.	A.	P.	Rs.	A.	P.
Brought over	....			1484	14	0
For Music Drums, &c., at 45 Rs. per mensem,	540	0	0			
,, Beggars, at Rs. 6 2 0 per do.	73	8	0			
,, Rajah Bag Durgah, at 2¾ Rs. per do.	30	0	0			
,, Munnar Samy, at 1 R. per do.	12	0	0			
,, Gopal Samy's Iyawar, at 2 Rs. per do.	24	0	0			
,, Gopal Samy's Poojah in August,	16	0	0			
,, Nagachoutee Feast,	3	8	0			
,, Hooly Feast,	9	12	0			
,, Seorathree-day, presents, sweetmeats for Patals, &c.	38	0	0			
,, Moharum Ashurkhana,	26	4	0			
,, Gosains, Doomors, &c.	14	4	0			
,, Deo's Morning Poojah in January,	2	0	0			
,, Poolary Jowan,	9	0	0			
				798	4	0
,, Zemindar's Allowance,	....			700	0	0
,, Stationery, Travellers, &c.	....			280	0	0
Total Rupees..				3,263	2	0

Costs of Manufacture of 1¼ Maunds of Iron.

	Pice.	Paddy Seers.
Wages to pound the stones sufficient for two butties,	0	3
Bellows man for the butties, per day,	3	12¼
Blacksmith, Hammer man, and Bellows boy to purify 2¼ maunds,	3	12¼
Blacksmith to reduce the above into small pieces,	2	4½
	8	32 or

	Annas 11
Price of 6 baskets of stones for 2 butties,	4
,, 5 do. hard charcoal,	4
,, 4 do. teak do.	5
	Rs. 1 8

Tools used in the process are,

4 Bellows.
2 Sledge Hammers.
2 Large pairs of Tongs.
2 Small do. do.
3 Hand Hammers, large.
3 Hand Hammers, small.
1 Crow Bar.
4 Bellow's Pipes.
2 Iron Rods.

The quantity drawn from the two butties is 2¼ maunds which is reduced to 1¼ by beating and clearing it if scoriæ.

General Statistical Table of the Sircar Yelgunthul showing the number of Villages, Houses, Tanks, Wells and Moats, the number of People of different descriptions composing the Population and their employment, the number of Cattle, the amount of Revenue, and the sources from which it is derived.

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	VILLAGES.									TANKS AND WELLS.								
			INHABITED.			DESERTED.			TOTAL.			LARGE TANKS.			SMALL TANKS.			WELLS.		
			Villages.	Hamlets.	Total.	Villages.	Hamlets.	Total.	Villages.	Hamlets.	Total.	InRepair.	Out of Repair.	Total.	InRepair.	Out of Repair.	Total.	InRepair.	Out of Repair.	Total.
1	45	Havalee Kutcoor } Nizambad }	48	36	84	0	15	15	48	51	99	41	17	58	71	176	247	438	323	761
2	37	Racherlah	33	11	44	4	12	16	37	23	60	48	24	72	31	86	117	186	118	304
3	62	Vejiaghery Velchal	59	34	93	3	0	3	62	34	96	48	5	53	84	79	163	204	187	391
4	41	Nunthaghere Nameleconda	35	20	55	6	0	6	41	20	61	27	11	38	30	172	202	178	393	571
5	31	Korootla	26	5	31	1	18	19	27	23	50	34	3	37	32	90	122	351	269	620
6	37	Sanegurum	25	10	35	11	12	23	36	22	58	13	14	27	32	132	164	234	415	649
7	50	Thevecondah	46	12	58	4	4	8	50	16	66	16	24	40	32	115	147	122	414	536
8	30	Polass	30	7	37	1	1	2	31	8	39	12	26	38	14	81	95	183	383	566
9	22	Anthagery	19	9	28	3	7	10	22	16	38	13	8	21	24	52	76	100	88	188
10	21	Vempully	19	3	22	2	5	7	21	8	29	15	8	23	13	76	89	193	217	410
11	10	Namapully	9	0	9	1	3	4	10	3	13	5	2	7	5	32	37	49	119	168
12	12	Koarum	12	3	15	1	0	1	13	3	16	11	4	15	22	34	56	104	429	533
13	25	Moncondoor	26	11	37	0	5	5	26	16	42	25	2	27	26	100	126	238	272	510
14	11	Velthe	11	2	13	0	1	1	11	3	14	16	1	17	16	31	47	83	53	136
15	51	Yamulvadah	49	18	67	4	21	25	53	39	92	43	19	62	61	164	225	558	438	996
16	18	Velloolah	12	13	25	4	10	14	16	23	39	13	3	16	20	88	108	717	188	905
17	19	Noostlapoorum	19	7	26	0	0	0	19	7	26	18	9	27	29	119	148	188	209	397
18	29	Arsekotah	30	4	34	7	7	14	37	11	48	15	11	26	25	66	91	107	142	249
		Total	508	205	713	52	121	173	560	326	886	413	191	604	567	1,693	2,260	4,233	4,657	8,890
	51	Jagheer Villages	44	27	71	5	19	24	49	46	95	37	24	61	54	141	195	644	431	1,075
		Grand Total	552	232	784	57	140	197	609	372	981	450	215	665	621	1,834	2,455	4,877	5,088	9,965

Number.	No. of Village.	NAMES OF THE PURGUNNAHS AND TALOOKS.	TANKS AND WELLS TOTAL.			Moats.	PLOUGHS.			CATTLE.								
										BULLOCKS.			BUFFALOES.			TOTAL.		
			In Repair.	Out of Repair.	Total.		Rice Ploughs.	Dry do.	Total.	Ploughing.	Other Cattle.	Total.	Ploughing.	Other Cattle.	Total.	Ploughing.	Other Cattle.	Total.
1	45	Havalee Kutcoor……… } Nizambad……… }	550	516	1,066	562	723	802	1,525	2,962	630	3,592	879	98	977	3,841	728	4,569
2	37	Racherlah………	265	228	493	275	620	370	990	1,967	176	2,143	508	40	548	2,472	216	2,691
3	62	Vejiaghery Velchal………	336	271	607	310	552	967	1,519	2,645	124	2,769	932	22	954	3,577	146	3,723
4	41	Nunthaghere Nameleconda………	235	576	811	235	359	516	875	1,918	378	2,296	207	140	347	1,125	518	2,643
5	31	Korootla………	417	362	779	502	344	358	702	1,480	406	1,886	445	91	536	1,925	497	2,422
6	37	Sanegurum………	279	561	840	394	349	419	768	1,598	313	1,911	372	64	436	1,970	377	2,347
7	50	Thevecondah………	170	553	723	0	19	644	663	2,382	186	2,568	94	76	170	2,476	262	2,738
8	30	Polass………	209	490	699	277	197	217	414	987	2	989	121	2	123	1,108	4	1,112
9	22	Anthagery………	137	148	285	178	157	176	333	641	80	721	113	44	157	754	124	878
10	21	Vempully………	221	301	522	190	201	347	548	982	148	1,130	199	48	247	1,181	196	1,377
11	10	Namapully………	59	153	212	77	84	114	198	351	97	448	62	22	84	413	119	532
12	12	Koarum………	137	467	604	147	104	175	279	443	88	531	183	44	227	626	132	758
13	25	Moncondoor………	289	374	663	337	405	469	874	1,824	96	1,920	398	56	454	2,222	152	2,374
14	11	Velthe………	115	85	200	113	126	124	250	502	20	522	133	0	133	635	20	655
15	51	Yamulvadah………	662	621	1,283	817	841	640	1,481	2,829	430	3,259	860	0	860	3,689	430	4,119
16	18	Velloolah………	750	279	1,029	3	310	317	627	1,167	527	1,694	431	138	569	1,598	665	2,263
17	19	Noostlapoorum………	235	337	572	296	320	272	592	1,383	15	1,398	601	0	601	1,984	15	1,999
18	28	Arsekotah………	147	219	366	50	118	399	517	994	35	1,029	91	19	110	1,085	54	1,139
		Total………	5,213	6,541	11,754	4,763	5,829	7,326	13,155	27,055	3,751	30,806	6,629	904	7,533	33,684	4,655	38,339
	51	Jagheer Villages………	736	596	1,332	730	1,004	993	1,997	4,355	886	5,241	1,133	194	1,327	5,488	1,080	6,568
		Grand Total………	5,949	7,137	13,086	5,493	6,833	8,319	15,152	31,410	4,637	36,047	7,762	1,098	8,860	39,172	5,735	44,907

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	CATTLE. COWS. Milch.	Young.	Calves.	Total.	BUFFALOES. Milch.	Young.	Total.	TOTAL. Milch.	Young.	Calves.	Total.	HORSES. Fullgrown.	Colts.	Total.
1	45	Havalee Kutcoor / Nizambad	5,706	1,410	3,197	10,313	1,335	1,219	2,554	7,041	1,410	4,416	12,867	80	38	118
2	37	Racherlah	3,140	891	1,488	5,519	666	473	1,139	3,806	891	1,961	6,658	49	26	75
3	62	Vejiaghery Velchal	4,195	1,126	2,530	7,851	1,827	1,344	3,171	6,022	1,126	3,874	11,022	50	33	83
4	41	Nunthaghere Nameleconda	3,722	1,092	3,214	8,028	762	792	1,554	4,484	1,092	4,006	9,582	27	12	39
5	31	Korootla	3,445	891	2,061	6,397	796	739	1,535	4,241	891	2,800	7,932	44	16	60
6	37	Sanegurum	3,740	789	1,590	6,119	692	532	1,224	4,432	789	2,122	7,343	54	11	65
7	50	Thevecondah	2,650	852	1,444	4,946	602	540	1,142	3,252	852	1,984	6,088	5	5	10
8	30	Polass	1,455	581	1,342	3,378	278	481	759	1,733	581	1,823	4,137	7	1	8
9	22	Anthagery	1,454	388	811	2,653	295	286	581	1,749	388	1,097	3,234	19	7	26
10	21	Vempully	837	310	425	1,572	225	155	380	1,062	310	580	1,952	6	10	16
11	10	Namapully	808	109	442	1,359	210	146	356	1,018	109	588	1,715	10	6	16
12	12	Koarum	1,100	260	490	1,850	130	74	204	1,230	260	564	2,054	17	9	26
13	25	Moncondoor	2,974	872	1,408	5,254	486	310	796	3,460	872	1,718	6,050	70	29	99
14	11	Velthe	1,195	531	551	2,277	213	175	388	1,408	531	726	2,665	9	4	13
15	51	Yamulvadah	4,163	1,270	2,742	8,175	983	749	1,732	5,146	1,270	3,491	9,907	10	87	97
16	18	Velloolah	1,537	841	891	3,269	747	615	1,362	2,284	841	1,506	4,631	30	17	47
17	19	Noostlapoorum	3,693	1,482	1,590	6,765	655	491	1,146	4,348	1,482	2,081	7,911	24	5	29
18	29	Arsekotah	1,139	310	643	2,092	282	178	460	1,421	310	821	2,552	5	2	7
		Total	46,953	14,005	26,859	87,817	11,184	9,299	20,483	58,137	14,005	36,158	1,08,300	516	318	834
	51	Jagheer Villages	6,254	1,674	4,013	11,941	1,896	1,737	3,633	8,150	1,674	5,751	15,575	122	60	182
		Grand Total	53,207	15,679	30,972	99,758	13,080	11,036	24,116	66,287	15,679	41,909	1,23,875	638	378	1,016

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	CATTLE. ASSES.			SHEEP.			GRAND TOTAL.				CARTS.		
			Asses.	Colts.	Total.	Sheep.	Lambs.	Total.	Large.	Young.	Calves.	Total.	Sowcars.	For Hire.	Total.
1	45	Havalee Kutcoor……………… Nizambad………………………	31	15	46	6,550	2,723	9,273	17,543	1,410	7,920	26,873	148	11	159
2	37	Racherlah……………………	62	24	86	2,523	843	3,366	8,915	891	3,070	12,876	0	62	62
3	62	Vejiaghery Velchal………………	0	0	0	5,018	2,621	7,639	14,667	1,126	6,674	22,467	36	102	138
4	41	Nunthaghere Nameleconda………	0	6	6	4,661	2,775	7,436	11,297	1,092	7,317	19,706	0	100	100
5	31	Korootla……………………	0	0	0	3,064	1,199	4,263	9,274	891	4,512	14,677	0	76	76
6	37	Sanegurum……………………	9	5	14	3,579	1,361	4,940	10,044	789	3,876	14,709	57	0	57
7	50	Thevecondah…………………	0	0	0	3,181	1,884	5,065	8,914	852	4,135	13,901	31	90	121
8	30	Polass………………………	0	0	0	482	212	694	3,330	581	2,040	5,951	0	0	0
9	22	Anthagery……………………	2	0	2	1,470	939	2,409	3,994	388	2,167	6,549	21	0	21
10	21	Vempully……………………	0	0	0	880	375	1,255	3,129	310	1,161	4,600	18	7	25
11	10	Namapully……………………	4	3	7	1,218	566	1,784	2,663	109	1,282	4,054	15	0	15
12	12	Koarum………………………	3	2	5	1,800	950	2,750	3,676	260	1,657	5,593	30	0	30
13	25	Moncondoor…………………	23	20	43	6,718	2,450	9,168	12,493	872	4,369	17,734	96	7	103
14	11	Velthe………………………	0	0	0	1,225	720	1,945	3,277	531	1,470	5,278	46	2	48
15	51	Yamulvadah…………………	19	6	25	4,768	2,458	7,226	13,632	1,270	6,472	21,374	105	4	109
16	18	Velloolah……………………	0	0	0	1,396	568	1,964	5,308	841	2,756	8,905	81	67	148
17	19	Noostlapoorum………………	0	0	0	4,972	2,080	7,052	11,328	1,482	4,181	16,991	55	1	56
18	29	Arsekotah……………………	0	0	0	981	420	1,401	3,492	310	1,297	5,099	91	0	91
		Total……………………	153	81	234	54,486	25,144	79,630	1,46,976	14,005	66,356	2,27,337	830	529	1,359
	51	Jagheer Villages…………	55	44	98	11,867	5,364	17,231	25,681	1,674	12,299	39,654	123	143	266
		Grand Total……………	207	125	332	66,353	30,508	96,861	1,72,657	15,679	78,655	2,66,991	953	672	1,625

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MEERASDARS. PATAILS. Houses.	Men.	Women.	Children.	Total.	PUTWARREES. Houses.	Men.	Women.	Children.	Total.	DESHMOOKS. Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor, Nizambad	117	257	278	242	777	60	85	103	62	250	0	0	0	0	0
2	37	Racherlah	95	221	223	162	606	26	41	47	13	101	0	0	0	0	0
3	62	Vejiaghery Velchal	48	93	112	122	327	39	64	63	51	178	15	30	44	32	106
4	41	Nunthaghere Nameleconda	41	97	110	115	322	19	29	29	18	76	0	0	0	0	0
5	31	Korootla	16	29	34	30	93	18	28	29	17	74	11	17	18	16	51
6	37	Sanegurum	18	52	55	71	178	26	30	38	20	88	8	22	30	21	73
7	50	Thevecondah	23	34	37	34	105	11	17	12	15	44	0	1	0	0	1
8	30	Polass	20	39	56	63	158	4	4	6	1	11	0	0	0	0	0
9	22	Anthagery	12	26	27	25	78	10	10	13	4	27	5	11	13	16	40
10	21	Vempully	20	30	34	45	109	6	6	10	12	28	0	0	0	0	0
11	10	Namapully	7	21	19	18	58	13	13	12	12	37	2	3	3	3	9
12	12	Koarum	10	19	26	34	79	1	2	2	4	8	4	11	11	20	42
13	25	Moncondoor	66	169	183	173	525	34	50	56	35	141	0	0	0	0	0
14	11	Velthe	23	42	40	45	127	10	11	13	9	33	0	0	0	0	0
15	51	Yamulvadah	118	258	278	215	751	34	52	59	34	145	0	0	0	0	0
16	18	Velloolah	18	32	34	24	90	12	16	17	3	36	1	1	1	5	7
17	19	Noostlapoorum	23	57	52	76	185	20	31	24	3	58	3	3	3	3	9
18	29	Arsekotah	14	30	29	34	93	1	1	2	2	5	2	2	4	2	8
		Total	689	1,506	1,627	1,528	4,661	344	490	535	315	1,340	51	101	127	118	346
	51	Jagheer Villages	55	135	145	133	413	45	69	84	63	216	3	11	8	3	22
		Grand Total	744	1,641	1,772	1,661	50,74	389	559	619	378	1,556	54	112	135	121	368

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MEERASDARS. DESHPONDIAS.					SIR DESHMOOKS.					SIR DESHPONDIAS.					BRAHMINS.				
			Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Totol.
1	45	Havalee Kutcoor / Nizambad	8	10	13	13	36	1	1	2	1	4	0	0	0	0	0	43	63	75	51	189
2	37	Racherlah	11	19	55	23	97	2	1	5	3	9	1	1	2	0	3	22	34	28	18	80
3	62	Vejiaghery Velchal	2	7	13	8	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	41	Nunthaghere Nameleconda	5	8	11	7	26	6	12	15	13	40	0	0	0	0	0	0	0	0	0	0
5	31	Korootla	2	6	5	0	11	0	0	0	0	0	0	0	0	0	0	19	25	21	13	59
6	37	Sanegurum	8	9	12	11	32	0	0	0	0	0	0	0	0	0	0	13	21	29	32	82
7	50	Thevecondah	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	3	6	4	2	12
8	30	Polass.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	12	4	20
9	22	Anthagery	2	4	4	3	11	0	0	0	0	0	0	0	0	0	0	6	6	5	7	18
10	21	Vempully	1	1	2	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	10	Namapully	2	2	2	6	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	3	7	10	12	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor	1	1	4	1	6	0	0	0	0	0	1	1	1	2	4	30	51	48	30	129
14	11	Velthe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	18	18	18	54
15	51	Yamulvadah	4	6	5	8	19	1	1	1	0	2	0	0	0	0	0	34	60	56	31	147
16	18	Velloolah	4	6	8	6	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	19	Noostlapoorum	4	5	6	4	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	2	2	3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	59	94	153	105	352	10	16	23	17	56	2	3	3	2	8	185	288	296	206	790
	51	Jagheer Villages	9	13	15	14	42	1	1	1	0	2	1	2	2	0	4	46	89	100	55	244
		Grand Total	68	107	168	119	394	11	17	24	17	58	3	5	5	2	12	231	377	396	261	1,034

Number	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MEERASDARS.																			
			PROITHS.					MUNNAWARS.					CARPENTERS.					BLACK SMITHS.				
			Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	0	0	0	0	0	0	0	0	0	0	49	84	86	89	259	36	64	73	53	190
2	37	Racherlah	0	0	0	0	0	0	0	0	0	0	29	57	56	42	155	28	42	44	25	111
3	62	Vejiaghery Velchal	35	53	65	45	163	0	0	0	0	0	58	100	95	111	306	41	73	78	69	220
4	41	Nunthaghere Nameleconda	14	20	15	13	48	0	0	0	0	0	20	32	30	36	98	16	32	33	28	93
5	31	Korootla	22	29	33	21	83	0	0	0	0	0	23	38	33	32	103	26	40	42	35	117
6	37	Sanegurum	27	40	41	31	112	3	4	3	6	13	20	37	42	45	124	13	20	20	23	63
7	50	Thevecondah	0	0	0	0	0	0	0	0	0	0	26	43	40	32	115	21	32	31	30	93
8	30	Polass	0	0	0	0	0	0	0	0	0	0	13	17	23	23	63	15	28	26	27	81
9	22	Anthagery	12	16	12	8	36	0	0	0	0	0	15	19	20	16	55	12	16	16	10	42
10	21	Vempully	9	9	7	20	36	0	0	0	0	0	15	18	19	7	44	17	16	19	18	53
11	10	Namapully	1	1	1	2	4	0	0	0	0	0	5	6	7	6	19	4	4	6	8	18
12	12	Koarum	6	11	10	13	34	0	0	0	0	0	8	12	12	20	44	5	9	8	11	28
13	25	Moncondoor	0	0	0	0	0	0	0	0	0	0	32	60	70	59	189	21	40	36	24	100
14	11	Velthe	0	0	0	0	0	0	0	0	0	0	9	14	13	11	38	11	17	15	14	46
15	51	Yamulvadah	0	0	0	0	0	0	0	0	0	0	46	68	69	58	195	44	65	61	49	175
16	18	Velloolah	18	19	25	19	63	0	0	0	0	0	19	24	27	24	75	18	35	32	18	85
17	19	Noostlapoorum	15	26	22	16	64	0	0	0	0	0	13	15	17	15	47	13	25	20	14	59
18	29	Arsekotah	2	2	2	3	7	0	0	0	0	0	10	20	16	17	53	10	14	16	9	39
		Total	161	226	233	191	650	3	4	3	6	13	410	664	675	643	1,982	351	572	576	465	1,613
	51	Jagheer Villages	0	0	0	0	0	0	0	0	0	0	52	100	103	101	304	42	79	88	78	245
		Grand Total	161	226	233	191	650	3	4	3	6	13	462	764	778	744	2,286	393	651	564	543	1,858

Number.	No. of Villages	NAMES OF THE PURGUNNAHS AND TALOOKS.	MEERASDARS. DHOBIES. Houses.	Men.	Women.	Children.	Total.	BARBERS. Houses.	Men.	Women.	Children.	Total.	KOOMARS. Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor } Nizambad }	113	178	187	156	521	47	67	72	74	213	49	86	83	87	256
2	37	Racherlah	70	109	109	86	304	34	49	49	37	135	22	42	44	31	117
3	62	Vejiaghery Velchal	129	208	208	247	663	42	76	77	63	216	41	65	74	67	206
4	41	Nunthaghere Nameleconda	51	81	87	96	264	19	36	36	28	100	18	26	25	33	84
5	31	Korootla	56	80	87	81	248	28	38	44	45	127	25	42	48	47	137
6	37	Sanegurum	54	75	77	90	242	21	41	38	34	113	20	40	41	44	125
7	50	Thevecondah	51	83	81	71	235	26	40	37	32	109	26	37	36	41	114
8	30	Polass	31	44	48	71	163	11	16	17	15	48	12	16	17	24	57
9	22	Anthagery	24	33	29	30	92	8	11	10	7	28	11	14	14	20	48
10	21	Vempully	32	40	38	45	123	17	21	19	15	55	22	27	30	31	88
11	10	Namapully	9	23	22	27	72	5	8	8	6	22	3	5	6	5	16
12	12	Koarum	18	23	25	36	84	5	7	7	11	25	8	11	11	16	38
13	25	Moncondoor	48	76	75	74	225	26	53	47	40	140	17	28	28	43	99
14	11	Velthe	18	31	30	32	93	8	13	12	11	36	6	14	15	13	42
15	51	Yamulvadah	96	149	155	128	432	40	70	73	47	190	38	56	63	58	177
16	18	Velloolah	47	77	72	44	193	18	28	27	21	76	18	37	35	23	95
17	19	Noostlapoorum	27	44	43	49	136	15	27	24	24	75	13	26	27	27	80
18	29	Arsekotah	30	39	43	49	131	12	14	18	22	54	14	17	18	18	53
		Total	904	1,393	1,416	1,412	4,221	382	615	615	532	1,762	363	589	615	628	1,832
	51	Jagheer Villages	111	199	220	199	618	56	123	116	104	343	52	96	90	93	279
		Grand Total	1,015	1,592	1,636	1,611	4,839	438	738	831	636	2,105	415	685	705	721	2,111

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MEERASDARS.																			
			THALAREES.					GOLD SMITHS.					NEERUDYWARS.					THUMDIES.				
			Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	29	48	48	46	142	23	42	42	40	124	13	16	17	14	47	23	33	32	25	90
2	37	Racherlah	24	39	41	37	117	2	2	2	3	7	35	58	65	46	169	7	11	8	3	22
3	62	Vejiaghery Velchal	12	20	15	26	61	38	70	83	85	238	32	46	54	53	153	16	27	36	32	95
4	41	Nunthaghere Nameleconda	3	3	4	5	12	22	40	45	48	133	5	9	11	15	35	8	9	9	9	27
5	31	Korootla	19	26	27	27	80	23	46	42	33	121	32	36	42	44	122	0	0	0	0	0
6	37	Sanegurum	18	28	29	33	90	29	42	51	51	144	3	5	5	4	14	10	15	13	12	40
7	50	Thevecondah	0	0	0	0	0	13	18	16	15	49	3	4	5	5	14	2	2	3	4	9
8	30	Polass	1	2	3	2	7	8	14	10	21	45	2	6	4	3	13	2	4	3	0	7
9	22	Anthagery	12	21	18	16	55	16	19	19	17	55	2	2	3	4	9	6	6	6	5	17
10	21	Vempully	6	7	10	9	26	9	11	9	4	24	5	4	5	4	13	3	5	4	3	12
11	10	Namapully	2	2	3	2	7	6	6	7	7	20	6	6	6	9	21	3	3	5	4	12
12	12	Koarum	0	0	0	0	0	7	12	11	10	33	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor	19	32	37	26	95	0	0	0	0	0	0	0	0	0	0	12	18	18	7	43
14	11	Velthe	1	1	1	1	3	0	0	0	0	0	0	0	0	0	0	4	7	7	4	18
15	51	Yamulvadah	25	36	25	27	88	40	66	77	46	189	27	33	32	31	96	14	25	19	11	55
16	18	Velloolah	9	11	11	9	31	13	19	17	23	59	18	33	25	25	83	8	12	18	10	40
17	19	Noostlapoorum	11	20	19	22	61	12	20	20	29	69	4	6	6	7	19	4	5	8	3	16
18	29	Arsekotah	3	5	3	4	12	5	7	7	14	28	0	0	0	0	0	3	2	3	2	7
		Total	194	301	294	292	887	266	434	458	446	1,338	187	264	280	264	808	125	184	192	134	510
	51	Jagheer Villages	14	14	16	21	51	41	69	69	69	207	18	28	30	27	85	22	40	36	17	93
		Grand Total	208	315	310	313	938	307	503	527	515	1,545	205	292	310	291	893	147	224	228	151	603

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MEERASDARS.														
			MEASURERS.					BAGAREES.					DHERS AND CHUMMARS.				
			Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor.............. Nizambad..................	125	170	178	179	527	196	252	284	224	760	240	373	373	380	1,126
2	37	Racherlah..........................	88	124	119	110	353	192	264	238	179	681	172	263	277	220	760
3	62	Vejiaghery Velchal...............	112	190	198	224	612	6	8	10	6	24	255	425	434	529	1,388
4	41	Nunthaghere Namelecondah......	42	62	68	69	199	22	40	36	34	110	131	228	221	275	724
5	31	Korootla..........................	54	70	79	81	230	29	35	42	27	104	108	160	166	155	481
6	37	Sanegurum........................	52	87	89	92	268	7	13	10	6	29	112	157	162	183	502
7	50	Thevecondah......................	72	104	112	127	343	55	75	78	64	217	181	290	289	228	807
8	30	Polass............................	15	19	26	28	73	2	2	3	4	9	193	265	277	292	834
9	22	Anthagery.........................	35	52	48	49	149	0	0	0	0	0	65	80	78	104	262
10	21	Vempully..........................	18	18	19	20	57	18	18	18	15	51	54	64	63	90	217
11	10	Namapully.........................	16	22	26	27	75	12	13	18	25	56	46	66	59	84	209
12	12	Koarum............................	16	21	24	28	73	36	36	40	42	118	32	36	38	57	131
13	25	Moncondoor........................	64	92	99	103	294	12	17	18	14	49	129	191	186	201	578
14	11	Velthe............................	23	30	27	23	80	2	2	2	2	6	64	86	98	116	300
15	51	Vamulvadah........................	137	203	190	174	567	201	277	233	201	711	228	344	364	296	1,004
16	18	Velloolah.........................	31	48	45	35	128	21	31	31	22	84	102	173	157	124	454
17	19	Noostlapoorum.....................	39	68	64	77	209	1	4	4	4	12	125	193	192	221	606
18	29	Arsekotah.........................	28	40	44	41	125	11	12	15	14	41	74	105	101	95	301
		Total..................	967	1,420	1,455	1,487	4,362	823	1,099	1,080	883	3,062	2,311	3,499	3,535	3,650	10,684
	51	Jagheer Villages.......	95	125	124	133	382	43	64	66	41	171	408	672	675	697	2,044
		Grand Total...........	1,062	1,545	1,579	1,620	4,744	866	1,163	1,146	924	3,233	2,719	4,171	3,210	3,347	12,728

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MEERASDARS. GRAND TOTAL.					LAND CULTIVATORS OR RYOTS. KOONBIES.					LAND CULTIVATORS. ELMAS.				
			Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor........ .... } Nizambad...... .... }	1,172	1,829	1,946	1,736	5,511	323	536	569	479	1,584	96	177	184	163	524
2	37	Racherlah.............	860	1,377	1,412	1,038	3,827	186	402	447	289	1,138	39	62	64	30	156
3	62	Vejiaghery Velchal.....	921	1,555	1,659	1,770	4,984	498	952	994	966	2,912	131	231	231	262	724
4	41	Nunthaghere Nameleconda..	442	764	785	842	2,391	258	465	462	428	1,355	24	37	45	39	121
5	31	Korootla..........................	511	745	792	704	2,241	275	508	555	417	1,480	91	156	175	157	488
6	37	Sanegurum....	462	738	785	809	2,332	165	294	354	287	935	2	6	7	5	18
7	50	Thevecondah......	513	789	781	700	2,270	308	465	473	396	1,334	0	0	0	0	0
8	30	Polass............	333	480	531	578	1,589	121	216	150	217	583	0	0	0	0	0
9	22	Anthagery....	253	346	335	341	1,022	93	141	139	133	413	12	17	16	14	47
10	21	Vempully	252	295	306	341	142	163	200	221	172	593	32	39	39	39	117
11	10	Namapully........................	142	204	210	251	665	41	78	77	90	245	7	9	12	15	36
12	12	Koarum...........	159	217	235	314	766	60	86	99	130	315	5	6	7	11	24
13	25	Moncondoor....	512	879	906	832	2,617	307	567	552	553	1,672	0	0	0	0	0
14	11	Velthe.............................	190	286	291	299	876	63	106	94	100	300	0	0	0	0	0
15	51	Yamulvadah......................	1,127	1,769	1,760	1,414	4,943	318	544	595	476	1,615	62	116	119	80	315
16	18	Velloolah...............	375	602	582	435	1,619	277	613	615	461	1,689	12	23	21	14	58
17	19	Noostlapoorum..................	342	575	551	594	1,720	194	350	372	367	1,089	14	30	26	22	78
18	29	Arsekotah.......	221	312	324	326	962	99	146	146	131	423	23	43	35	23	101
		Total....	8,787	13,762	14,191	13,324	41,277	3,749	6,669	6,914	6,092	19,675	550	952	981	874	2,807
	51	Jagheer Villages....	1,141	1,929	1,988	1,848	5,765	566	1,183	1,196	827	3,206	62	109	108	107	324
		Grand Total.........	9,928	15,691	16,179	15,172	47,042	4,315	7,852	8,110	6,919	22,881	612	1,061	1,089	981	3,131

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND CULTIVATORS. BAKAULS. Houses.	Men.	Women.	Children.	Total.	TODDY SELLERS. Houses.	Men.	Women.	Children.	Total.	BRAHMINS. Houses.	Men.	Women.	Children.	Total.	JUNGUMS. Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	40	61	63	57	181	86	128	150	146	424	16	27	23	15	65	0	0	0	0	0
2	37	Racherlah	16	33	35	26	94	18	37	36	23	96	0	0	0	0	0	0	0	0	0	0
3	62	Vejiaghery Velchal	14	36	30	32	98	28	56	60	49	165	1	1	1	4	6	0	0	0	0	0
4	41	Nunthaghere Nameleconda	9	18	17	18	53	10	18	25	35	78	0	0	0	0	0	11	22	24	15	61
5	31	Korootla	9	27	25	22	74	0	0	0	0	0	0	0	0	0	0	4	4	5	7	16
6	37	Sanegurum	15	34	35	23	92	0	0	0	0	0	0	0	0	0	0	8	12	14	15	41
7	50	Thevecondah	20	26	30	22	78	5	5	7	5	17	0	0	0	0	0	2	2	2	2	6
8	30	Polass	19	22	28	31	81	24	31	30	40	101	4	0	0	0	0	2	3	1	1	5
9	22	Anthagery	7	12	12	11	35	0	0	0	0	0	0	0	0	0	0	9	11	12	11	34
10	21	Vempully	6	4	7	4	15	16	22	25	20	67	9	12	10	3	25	0	0	0	0	0
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	5	5	14
12	12	Koarum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor	11	19	22	19	60	29	51	56	45	152	5	8	7	5	20	6	9	10	12	31
14	11	Velthe	10	19	22	26	67	8	8	8	14	30	4	7	6	6	19	22	31	41	27	99
15	51	Yamulvadah	20	48	37	21	106	119	200	215	168	583	5	7	3	3	13	0	0	0	0	0
16	18	Velloolah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	19	Noostlapoorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	3	4	4	5	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	199	363	367	317	1,047	343	556	612	545	1,713	44	62	50	36	148	68	98	114	95	307
	51	Jagheer Villages	16	20	20	14	54	0	0	0	0	0	109	196	206	182	584	2	6	4	2	12
		Grand Total	215	383	387	331	1,101	343	556	612	545	1,713	153	258	256	218	732	70	104	118	97	319

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND CULTIVATORS. MOONOORWARS. Houses.	Men.	Women.	Children.	Total.	TELINGAS. Houses.	Men.	Women.	Children.	Total.	SHEPHERDS. Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor…… Nizambad……	0	0	0	0	0	236	389	400	346	1,135	44	72	80	55	207
2	37	Racherlah……	66	112	119	87	318	49	61	71	45	177	25	44	40	37	121
3	62	Vejiaghery Velchal……	0	0	0	0	0	253	430	484	553	1,467	41	98	119	88	305
4	41	Nunthaghere Nameleconda……	184	342	357	344	1,043	0	0	0	0	0	8	20	17	18	55
5	31	Korootla……	62	109	114	109	332	10	12	17	15	44	34	47	53	44	144
6	37	Sanegurum……	58	98	100	91	289	4	8	9	6	23	2	7	7	7	21
7	50	Thevecondah……	109	160	153	149	462	70	89	92	88	269	19	28	28	17	73
8	30	Polass……	111	179	186	194	559	32	53	46	46	145	13	17	20	28	65
9	22	Anthagery……	18	26	26	21	73	4	6	6	2	14	13	16	17	18	51
10	21	Vempully……	120	134	134	95	363	4	6	4	3	13	32	33	36	34	103
11	10	Namapully……	16	21	23	25	69	0	0	0	0	0	5	7	5	9	21
12	12	Koarum……	27	32	33	43	108	2	2	5	4	11	17	20	20	31	71
13	25	Moncondoor……	13	23	22	13	58	64	105	96	102	303	30	57	47	48	152
14	11	Velthe……	9	12	13	12	37	13	18	19	23	60	7	9	10	7	26
15	51	Yamulvadah……	202	332	328	311	971	40	93	94	65	252	33	54	56	49	159
16	18	Velloolah……	97	201	198	102	501	0	0	0	0	0	9	18	14	11	43
17	19	Noostlapoorum……	30	53	55	60	168	0	0	0	0	0	8	9	11	18	38
18	29	Arsekotah……	136	201	190	141	532	0	0	0	0	0	13	19	19	14	52
		Total……	1,258	2,035	2,051	1,797	5,883	781	1,272	1,343	1,298	3,913	353	575	599	533	1,707
	51	Jagheer Villages……	151	247	272	222	741	20	24	24	31	79	23	33	33	39	105
		Grand Total……	1,409	2,282	2,323	2,019	6,624	801	1,296	1,367	1,329	3,992	376	608	632	572	1,812

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND CULTIVATORS. MOOSTEEGOLLALOO. Houses.	Men.	Women.	Children.	Total.	KAYETHS & RAJPOOTHS. Houses.	Men.	Women.	Children.	Total.	NAIKWARREES. Houses.	Men.	Women.	Children.	Total.	MUNNAKAVALECARS. Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor } Nizambad }	0	0	0	0	0	6	13	8	2	23	0	0	0	0	0	0	0	0	0	0
2	37	Racherlah	1	4	2	2	8	10	20	19	12	51	3	3	3	4	10	0	0	0	0	0
3	62	Vejiaghery Velchal	0	0	0	0	0	5	16	16	22	54	0	0	0	0	0	0	0	0	0	0
4	41	Nunthaghere Nameleconda	7	13	14	9	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	31	Korootla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118	147	154	129	430
6	37	Sanegurum	0	0	0	0	0	10	15	20	15	50	45	90	104	76	270	0	0	0	0	0
7	50	Thevecondah	0	0	0	0	0	1	1	1	1	3	1	1	1	2	4	0	0	0	0	0
8	30	Polass	8	12	9	21	42	1	1	1	2	4	1	1	2	1	4	0	0	0	0	0
9	22	Anthagery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	5	6	5	10	21	0	0	0	0	0	6	8	8	9	25	0	0	0	0	0
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	0	0	0	0	0	0	0	0	0	0	6	11	11	19	41	0	0	0	0	0
13	25	Moncondoor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	11	Velthe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	2	2	2	2	6	2	4	3	2	9	2	4	4	2	10	0	0	0	0	0
16	18	Velloolah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	19	Noostlapoorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	0	0	0	0	0	0	0	0	0	0	11	12	22	15	49	0	0	0	0	0
		Total	23	37	32	44	113	35	70	68	56	194	75	130	155	128	413	118	147	154	129	430
	51	Jagheer Villages	1	1	1	1	3	14	20	30	10	60	5	10	11	9	30	0	0	0	0	0
		Grand Total	24	38	33	45	116	49	90	98	66	254	80	140	166	137	443	118	147	154	129	430

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND CULTIVATORS. VILLAGE PEONS. Houses.	Men.	Women.	Children.	Total.	NEERUDYWARS. Houses.	Men.	Women.	Children.	Total.	THALAREES. Houses.	Men.	Women.	Children.	Total.	MUSSELMEN. Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor.................. Nizambad........................	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10	7	8	25
2	37	Racherlah..........	0	0	0	0	0	1	1	1	1	3	3	9	7	5	21	5	7	8	9	24
3	62	Vejiaghery Velchal................	0	0	0	0	0	6	14	14	13	41	0	0	0	0	0	0	0	0	0	0
4	41	Nunthaghere Nameleconda..........	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	15	11	17	43
5	31	Korootla..........................	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	8	5	21
6	37	Sanegurum.........................	0	0	0	0	0	0	0	0	0	0	3	4	4	7	15	5	9	8	5	22
7	50	Thevecondah.......................	29	43	42	34	119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	30	Polass.............	64	79	93	92	264	0	0	0	0	0	1	2	2	2	6	2	2	4	2	8
9	22	Anthagery.........................	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	4	4	12
10	21	Vempully..........	0	0	0	0	0	0	0	0	0	0	2	2	2	0	4	12	16	15	13	44
11	10	Namapully..........	0	0	0	0	0	0	0	0	0	0	1	2	2	3	7	0	0	0	0	0
12	12	Koarum.	0	0	0	0	0	2	2	2	3	7	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor........................	1	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	11	Velthe............................	2	3	3	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah........................	0	0	0	0	0	0	0	0	0	0	1	1	1	0	2	13	22	17	13	52
16	18	Velloolah.........................	0	0	0	0	0	0	0	0	0	0	4	5	5	2	12	0	0	0	0	0
17	19	Noostlapoorum.....................	0	0	0	0	0	0	0	0	0	0	26	34	32	52	118	0	0	0	0	0
18	29	Arsekotah..........	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total....................	96	126	139	128	393	9	17	17	17	51	41	59	55	71	185	55	93	82	76	251
	51	Jagheer Villages..............	43	70	67	83	220	2	6	6	4	16	7	9	8	7	24	6	10	10	9	29
		Grand Total......	139	196	206	211	613	11	23	23	21	67	48	68	63	78	209	61	103	92	85	280

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND CULTIVATORS. Diiers and Bagaries. Houses.	Men.	Women.	Children.	Total.	Chummars. Houses.	Men.	Women.	Children.	Total.	Grand Total. Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	71	115	104	80	299	12	15	15	18	48	935	1,543	1,603	1,369	4,515
2	37	Racherlah	1	2	2	2	6	61	100	95	71	266	484	897	949	643	2,489
3	62	Vejiaghery Velchal	0	0	0	0	0	0	0	0	0	0	977	1,834	1,949	1,989	5,772
4	41	Nunthaghere Nameleconda	16	22	23	31	76	0	0	0	0	0	535	972	995	954	2,921
5	31	Korootla	0	0	0	0	0	0	0	0	0	0	605	1,018	1,106	905	3,029
6	37	Sanegurum	8	13	13	7	33	0	0	0	0	0	325	590	675	544	1,809
7	50	Thevecondah	37	47	44	44	135	37	43	46	48	137	638	910	919	808	2,637
8	30	Polass	142	49	53	51	153	29	21	31	48	100	574	688	656	776	2,120
9	22	Anthagery	3	4	4	4	12	0	0	0	0	0	162	237	236	218	691
10	21	Vempully	64	65	67	71	203	3	4	4	3	11	474	551	577	476	1,604
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	74	121	124	147	392
12	12	Koarum	10	11	12	11	34	12	14	14	18	46	141	184	203	270	657
13	25	Moncondoor	23	35	36	33	104	0	0	0	0	0	489	875	849	830	2,554
14	11	Velthe	1	1	1	0	2	0	0	0	0	0	139	214	217	217	648
15	51	Yamulvadah	44	59	69	49	177	0	0	0	0	0	863	1,486	1,543	1,241	4,270
16	18	Velloolah	2	4	6	6	16	0	0	0	0	0	401	864	859	596	2,319
17	19	Noostlapoorum	4	8	10	10	28	0	0	0	0	0	276	484	506	529	1,519
18	29	Arsekotah	21	37	29	24	90	2	4	5	2	11	308	466	450	355	1,271
		Total	447	472	473	423	1,368	156	201	210	208	619	8,400	13,934	14,416	12,867	41,217
	51	Jagheer Villages	10	18	20	24	62	24	27	34	40	101	1,121	1,989	2,050	1,611	5,650
		Grand Total	457	490	493	447	1,430	180	228	244	248	720	9,521	15,923	16,466	14,478	46,867

			MOTHURPHA OR DOOKANDARS.																	
			BAKAULS.						WEAVERS.						CARPET MAKERS.					
Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	Houses.	Dookans.	Men.	Women.	Children.	Total.	Houses.	Looms.	Men.	Women.	Children.	Total.	Houses.	Looms.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor, Nizambad	265	173	490	496	440	1,426	289	291	429	446	442	1,317	0	0	0	0	0	0
2	37	Racherlah	112	97	191	200	173	564	115	115	171	154	111	436	0	0	0	0	0	0
3	62	Vejiaghery Velchal	178	176	317	353	366	1,036	322	330	530	538	571	1,639	2	2	4	4	2	10
4	41	Nunthaghere Nameleconda	72	71	111	128	102	341	139	172	215	222	316	753	0	0	0	0	0	0
5	31	Korootla	130	50	219	265	199	683	244	239	400	420	333	1,153	0	0	0	0	0	0
6	37	Sanegurum	77	71	127	119	89	335	136	178	206	218	227	651	0	0	0	0	0	0
7	50	Thevecondah	34	37	54	55	65	174	141	138	218	198	215	631	0	0	0	0	0	0
8	30	Polass	9	9	2	2	6	10	51	51	75	83	126	284	0	0	0	0	0	0
9	22	Anthagery	27	26	42	48	42	132	54	61	70	71	65	206	0	0	0	0	0	0
10	21	Vempully	16	16	20	18	17	55	68	69	77	83	62	222	0	0	0	0	0	0
11	10	Namapully	13	12	16	21	6	43	38	48	54	58	77	189	0	0	0	0	0	0
12	12	Koarum	21	19	27	27	30	84	49	55	49	55	80	184	0	0	0	0	0	0
13	25	Moncondoor	84	68	182	165	177	524	149	155	224	234	234	692	0	0	0	0	0	0
14	11	Velthe	11	10	23	26	23	72	46	45	63	57	58	178	0	0	0	0	0	0
15	51	Yamulvadah	126	86	209	239	172	620	288	279	407	454	344	1,205	0	0	0	0	0	0
16	18	Velloolah	99	20	180	205	81	466	238	259	357	394	365	1,116	0	0	0	0	0	0
17	19	Noostlapoorum	36	33	53	64	91	208	84	77	106	112	159	377	0	0	0	0	0	0
18	29	Arsekotah	30	30	44	46	46	136	61	57	74	70	78	222	0	0	0	0	0	0
		Total	1,340	1,004	2,307	2,477	2,125	6,909	2,512	2,619	3,725	3,867	3,863	11,455	2	2	4	4	2	10
	51	Jagheer Villages	319	269	721	716	579	2,016	384	432	706	745	603	2,054	0	0	0	0	0	0
		Grand Total	1,659	1,273	3,028	3,193	2,704	8,925	2,896	3,051	4,431	4,612	4,466	13,509	2	2	4	4	2	10

Number.	No. of Villages.	Names of the Purgunnahs and Talooks.	MOTHURPHA. Dhungars. Houses.	Looms.	Men.	Women.	Children.	Total.	Cotton Cleaners. Houses.	Bows.	Men.	Women.	Children.	Total.	Oil Pressers. Houses.	Mills.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor } Nizambad }	107	62	159	176	169	504	42	42	58	65	69	192	25	25	38	45	43	126
2	37	Racherlah	3	3	3	3	3	9	30	27	50	41	50	141	7	7	9	9	6	24
3	62	Vejiaghery Velchal	67	57	106	120	122	348	50	50	75	78	99	252	22	22	34	42	37	113
4	41	Nunthaghere Nameleconda	128	26	216	222	242	680	16	16	28	27	34	89	11	11	16	16	26	58
5	31	Korootla	15	13	20	16	13	49	26	25	29	33	28	90	17	17	29	27	32	88
6	37	Sanegurum	99	39	131	149	138	418	25	25	32	36	44	112	7	7	10	11	14	35
7	50	Thevecondah	15	14	15	16	20	51	18	18	22	20	24	66	20	20	30	29	26	85
8	30	Polass	2	2	3	3	6	12	8	8	10	13	11	34	7	6	9	11	11	31
9	22	Anthagery	71	8	105	110	108	323	10	10	15	15	18	48	2	2	6	6	4	16
10	21	Vempully	12	0	13	15	12	40	14	14	15	14	13	42	8	8	8	11	8	27
11	10	Namapully	27	0	38	38	37	113	6	6	7	9	9	25	1	1	2	1	0	3
12	12	Koarum	44	15	48	54	76	178	10	10	14	14	22	50	2	2	3	3	7	13
13	25	Moncondoor	131	28	211	208	202	621	27	27	37	36	46	119	12	11	16	20	23	59
14	11	Velthe	29	0	38	38	48	124	8	7	11	15	11	37	6	6	9	10	6	25
15	51	Yamulvadah	59	58	96	107	83	286	41	41	59	62	65	186	25	25	36	37	40	113
16	18	Velloolah	5	4	6	7	7	20	22	23	30	35	31	96	9	9	15	16	16	47
17	19	Noostlapoorum	12	12	19	24	25	68	12	12	19	19	20	58	5	5	7	7	4	18
18	29	Arsekotah	23	13	26	30	23	79	10	10	11	10	13	34	7	8	9	12	10	31
		Total	849	354	1,253	1,336	1,334	3,923	375	371	522	542	607	1,671	193	192	286	313	313	912
	51	Jagheer Villages	89	42	127	146	173	446	40	39	66	71	85	222	23	21	40	48	42	130
		Grand Total	938	396	1,380	1,482	1,507	4,369	415	410	588	613	692	1,893	216	213	326	361	355	1,042

Number.	No. of Villages	Names of the Purgunnahs and Talooks.	Mothurpha. Goldsmiths. Houses.	Fire Chutties.	Men.	Women.	Children.	Total.	Bangle Sellers. Houses.	Malarum.	Men.	Women.	Children.	Total.	Painters. Houses.	Dookans.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	40	41	85	92	70	247	4	4	6	7	7	20	0	0	0	0	0	0
2	37	Racherlah	26	22	42	46	44	132	5	5	6	6	4	16	1	1	2	1	1	4
3	62	Vejiaghery Velchal	12	12	21	25	26	72	4	4	12	12	9	33	0	0	0	0	0	0
4	41	Nunthaghere Nameleconda	0	0	0	0	0	0	1	1	3	1	0	4	0	0	0	0	0	0
5	31	Korootla	11	10	23	30	19	72	4	4	5	6	6	17	0	0	0	0	0	0
6	37	Sanegurum	1	1	1	2	1	4	3	3	5	6	4	15	1	1	1	1	0	2
7	50	Thevecondah	3	8	2	3	1	6	0	0	0	0	0	0	0	0	0	0	0	0
8	30	Polass	5	5	6	4	7	17	0	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	0	0	0	0	0	0	1	1	1	1	2	4	0	0	0	0	0	0
10	21	Vempully	8	10	9	7	9	25	0	0	0	0	0	0	0	0	0	0	0	0
11	10	Namapully	3	3	3	3	4	10	0	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor	32	28	60	59	71	190	3	3	3	4	2	9	1	1	1	2	0	3
14	11	Velthe	12	10	13	15	28	56	1	1	2	2	2	6	1	1	2	2	2	6
15	51	Yamulvadah	5	5	6	5	7	18	9	8	12	8	7	27	0	0	0	0	0	0
16	18	Velloolah	18	12	33	38	24	95	2	2	2	2	3	7	7	3	7	9	16	32
17	19	Noostlapoorum	5	5	8	8	13	29	3	2	5	6	7	18	0	0	0	0	0	0
18	29	Arsekotah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	181	172	312	337	324	973	40	38	62	61	53	176	11	7	13	15	19	47
	51	Jagheer Villages	43	44	74	94	101	269	19	16	33	42	39	114	1	1	1	1	1	3
		Grand Total	224	216	386	431	425	1,242	59	54	95	103	92	290	12	8	14	16	20	50

Number.	No. of Villages.	Names of the Purgunnahs and Talooks.	Mothurpha. Mochees. Houses.	Dookans.	Men.	Women.	Children.	Total.	Munmhars. Houses.	Dookans.	Men.	Women.	Children.	Total.	Beetle and Tobacco Sellers. Houses.	Dookans.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	2	2	4	3	1	8	4	2	5	6	5	16	2	2	3	4	1	8
2	37	Racherlah	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3	0	6
3	62	Vejiaghery Velchal	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	5	2	11
4	41	Nunthaghere Nameleconda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	31	Korootla	0	0	0	0	0	0	5	0	5	5	6	16	3	3	3	4	2	9
6	37	Sanegurum	3	0	4	4	3	11	0	0	0	0	0	0	2	2	3	5	5	13
7	50	Thevecondah	0	0	0	0	0	0	6	4	6	6	7	19	0	0	0	0	0	0
8	30	Polass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor	1	1	4	5	0	9	0	0	0	0	0	0	2	2	3	4	2	9
14	11	Velthe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3	3	3	9
16	18	Velloolah	4	4	11	15	10	36	0	0	0	0	0	0	1	1	1	1	0	2
17	19	Noostlapoorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	10	7	23	27	14	64	15	6	16	17	18	51	16	15	23	29	15	67
	51	Jagheer Villages	8	8	10	16	20	46	1	0	1	3	0	4	5	4	8	9	7	24
		Grand Total	18	15	33	43	34	110	16	6	17	20	18	55	21	19	31	38	22	91

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MOTHURPHA. TAILORS. Houses.	Dookans.	Men.	Women.	Children.	Total.	DYERS. Houses.	Dookans.	Men.	Women.	Children.	Total.	SILK WEAVERS. Houses.	Looms.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	27	26	46	46	29	121	6	6	11	12	8	31	4	5	7	5	5	17
2	37	Racherlah	8	8	10	12	11	33	1	1	4	4	8	16	0	0	0	0	0	0
3	62	Vejiaghery Velchal	18	18	33	34	37	104	13	13	21	21	17	59	0	0	0	0	0	0
4	41	Nunthaghere Nameleconda	7	7	14	13	15	42	0	0	0	0	0	0	0	0	0	0	0	0
5	31	Korootla	19	19	28	31	25	84	4	4	11	15	10	36	10	4	15	22	15	52
6	37	Sanegurum	13	13	21	19	20	60	0	0	0	0	0	0	0	0	0	0	0	0
7	50	Thevecondah	9	9	13	13	15	41	0	0	0	0	0	0	0	0	0	0	0	0
8	30	Polass	1	1	2	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	2	0	4	3	1	8	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	8	8	10	11	5	26	0	0	0	0	0	0	0	0	0	0	0	0
11	10	Namapully	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	3	3	3	4	5	12	0	0	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor	15	13	32	36	28	96	0	0	0	0	0	0	0	0	0	0	0	0
14	11	Velthe	5	5	9	10	7	26	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	21	1	19	29	44	92	5	0	9	7	5	21	0	0	0	0	0	0
16	18	Velloolah	15	5	20	23	19	62	10	2	14	20	9	43	7	6	11	11	7	29
17	19	Noostlapoorum	4	4	5	6	10	21	1	1	1	0	0	1	0	0	0	0	0	0
18	29	Arsekotah	2	2	3	3	1	7	0	0	0	0	0	0	0	0	0	0	0	0
		Total	178	143	272	295	274	841	40	27	71	79	57	207	21	15	33	38	27	98
	51	Jagheer Villages	58	52	131	116	93	340	25	18	48	46	52	147	5	4	7	13	6	26
		Grand Total	236	195	403	411	367	1,181	65	45	119	125	109	354	26	19	40	51	33	124

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MOTHURPHA.																	
			MOONOORWARS.						BULJEWARS.						KUSSARS.					
			Houses.	Dookans.	Men.	Women.	Children.	Total.	Houses.	Dookans.	Men.	Women.	Children.	Total.	Houses.	Dookans.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	17	1	19	22	15	56	12	0	20	21	22	63	13	6	28	31	29	88
2	37	Racherlah	4	0	4	4	5	13	1	0	2	1	1	4	3	2	6	8	6	20
3	62	Vejiaghery Velchal	0	0	0	0	0	0	0	0	0	0	0	0	6	6	12	14	10	36
4	41	Nunthaghere Nameleconda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	31	Korootla	0	0	0	0	0	0	2	0	3	1	0	4	4	3	8	9	3	20
6	37	Sanegurum	1	0	0	1	0	1	0	0	0	0	0	0	1	1	1	1	0	2
7	50	Thevecondah	6	0	6	8	4	18	0	0	0	0	0	0	1	1	4	2	2	8
8	30	Polass	1	1	1	2	2	5	0	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	3
10	21	Vempully	16	0	16	15	10	41	0	0	0	0	0	0	1	1	1	0	0	1
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor	35	0	54	51	36	141	16	0	32	34	12	78	0	0	0	0	0	0
14	11	Velthe	3	0	3	3	2	8	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	17	0	37	39	30	106	10	0	15	18	15	48	1	1	1	1	1	3
16	18	Velloolah	0	0	0	0	0	0	2	1	4	5	1	10	6	1	7	9	7	23
17	19	Noostlapoorum	0	0	0	0	0	0	5	4	6	7	6	19	18	10	20	16	17	53
18	29	Arsekotah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	100	2	140	145	104	389	48	5	82	87	57	226	55	33	89	92	76	257
	51	Jagheer Villages	3	1	4	4	7	15	15	7	27	30	30	93	13	10	22	25	22	69
		Grand Total	103	3	144	149	111	404	63	12	109	117	87	319	68	43	111	117	98	326

Number.	No. of Villages.	Names of the Purgunnahs and Talooks.	Mothurpha. Tin Makers. Houses.	Tin Makers. Dookans.	Tin Makers. Men.	Tin Makers. Women.	Tin Makers. Children.	Tin Makers. Total.	Musicians. Houses.	Musicians. Dookans.	Musicians. Men.	Musicians. Women.	Musicians. Children.	Musicians. Total.	Scent Makers. Houses.	Scent Makers. Dookans.	Scent Makers. Men.	Scent Makers. Women.	Scent Makers. Children.	Scent Makers. Total.
1	45	Havalee Kutcoor / Nizambad	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	3	3	8
2	37	Racherlah	3	0	4	4	2	10	1	0	1	1	0	2	1	0	2	1	1	4
3	62	Vejiaghery Velchal	1	0	1	1	2	4	0	0	0	0	0	0	7	6	11	11	11	33
4	41	Nunthaghere Nameleconda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	31	Korootla	1	0	1	2	1	4	7	0	8	9	6	23	4	4	5	8	6	19
6	37	Sanegurum	2	0	3	2	2	7	1	0	1	1	1	3	1	1	2	1	0	3
7	50	Thevecondah	0	0	0	0	0	0	1	0	1	1	1	3	0	0	0	0	0	0
8	30	Polass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	71	67	100	106	109	315	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	0	4
12	12	Koarum	0	0	0	0	0	0	1	0	2	2	2	6	0	0	0	0	0	0
13	25	Moncondoor	0	0	0	0	0	0	3	0	8	8	3	19	0	0	0	0	0	0
14	11	Velthe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3	3	8
16	18	Velloolah	25	0	26	28	22	76	2	0	5	5	1	11	7	3	14	13	5	32
17	19	Noostlapoorum	1	0	0	2	1	3	1	0	1	1	1	3	1	1	4	4	2	10
18	29	Arsekotah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	104	67	135	145	139	419	17	0	27	28	15	70	25	18	43	47	31	121
	51	Jagheer Villages	2	2	4	4	3	11	16	0	28	29	37	94	6	6	17	14	15	46
		Grand Total	106	69	139	149	142	430	33	0	55	57	52	164	31	24	60	61	46	167

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MOTHURPHA. BAMBOO SELLERS. Houses.	Dookans.	Men.	Women.	Children.	Total.	SHEPHERDS. Houses.	Dookans.	Men.	Women.	Children.	Total.	TODDY SELLERS. Houses.	Dookans.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	10	10	14	14	11	39	115	0	148	161	138	447	195	176	289	301	270	860
2	37	Racherlah	7	7	8	12	8	28	99	0	151	149	117	417	118	106	176	196	158	530
3	62	Vejiaghery Velchal	13	13	20	24	26	70	211	0	390	355	377	1,122	283	283	452	459	534	1,445
4	41	Nunthaghere Nameleconda	4	4	6	5	3	14	0	0	0	0	0	0	118	117	188	199	211	598
5	31	Korootla	8	8	12	13	9	34	63	0	87	86	69	242	73	25	128	128	110	366
6	37	Sanegurum	6	6	8	9	11	28	25	0	42	41	33	116	152	147	227	255	264	746
7	50	Thevecondah	7	7	10	11	9	30	80	21	85	87	83	255	55	55	86	88	68	242
8	30	Polass	4	4	4	4	6	14	0	0	0	0	0	0	10	11	17	19	14	50
9	22	Anthagery	2	0	2	2	1	5	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	2	2	2	2	4	8	0	0	0	0	0	0	5	5	8	6	5	19
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	0	0	29	29	41	46	53	140
12	12	Koarum	1	1	1	0	2	3	0	0	0	0	0	0	43	43	57	61	76	194
13	25	Moncondoor	0	0	0	0	0	0	0	0	0	0	0	0	125	132	208	227	196	631
14	11	Velthe	0	0	0	0	0	0	0	0	0	0	0	0	42	41	53	55	52	160
15	51	Yamulvadah	12	1	16	17	17	50	123	0	169	170	142	481	17	18	29	30	31	90
16	18	Velloolah	27	0	46	48	40	134	55	0	80	75	55	210	56	12	99	112	109	320
17	19	Noostlapoorum	5	0	6	6	10	22	94	0	104	120	138	362	101	30	162	172	189	523
18	29	Arsekotah	0	0	0	0	0	0	16	0	20	16	17	53	36	29	63	57	47	167
		Total	108	63	155	167	157	479	881	21	1,276	1,260	1,169	3,705	1,458	1,259	2,283	2,411	2,387	7,081
	51	Jagheer Villages	26	25	35	36	42	113	105	0	193	197	163	553	219	146	431	440	357	1,228
		Grand Total	134	88	190	203	199	592	986	21	1,469	1,457	1,332	4,258	1,677	1,405	2,714	2,851	2,744	8,309

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MOTHURPHA. ARRACK SELLERS. Houses.	Dookans.	Men.	Women.	Children.	Total.	HIDE SELLERS. Houses.	Dookans.	Men.	Women.	Children.	Total.	BUTCHERS. Houses.	Dookans.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor } Nizambad }	7	7	11	12	8	31	5	0	6	5	5	16	3	3	4	5	7	16
2	37	Racherlah	2	2	3	2	1	6	0	0	0	0	0	0	0	0	0	0	0	0
3	62	Vejiaghery Velchal	2	2	2	2	3	7	0	0	0	0	0	0	1	1	1	1	4	6
4	41	Nunthaghere Nameleconda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	31	Korootla	0	0	0	0	0	0	0	0	0	0	0	0	9	9	20	22	13	55
6	37	Sanegurum	1	1	0	1	0	1	68	104	76	85	93	254	1	1	1	1	0	2
7	50	Thevecondah	1	1	2	2	1	5	32	1	33	33	32	98	1	1	2	2	1	5
8	30	Polass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	5	5	8	5	8	21	0	0	0	0	0	0	0	0	0	0	0	0
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor	2	2	3	3	1	7	0	0	0	0	0	0	1	1	2	3	4	9
14	11	Velthe	0	0	0	0	0	0	0	0	0	0	0	0	3	1	3	3	4	10
15	51	Yamulvadah	25	21	36	40	35	111	0	0	0	0	0	0	1	0	1	1	0	2
16	18	Velloolah	0	0	0	0	0	0	21	12	27	26	28	81	1	1	3	4	1	8
17	19	Noostlapoorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	6	6	5	7	6	18	11	0	17	17	13	47	0	0	0	0	0	0
		Total	51	47	70	74	63	207	137	117	159	166	171	496	21	18	37	42	34	113
	51	Jagheer Villages	13	12	18	29	21	68	65	4	94	90	79	263	14	14	26	36	34	96
		Grand Total	64	59	88	103	84	275	202	121	253	256	250	759	35	32	63	78	68	209

Number.	No. of Villages.	Names of the Purgunnahs and Talooks.	Grand Total of Mothurpha.												Kooshbash or unemployed people of the villages. Brahmins.				
			Houses.	Dookans.	Looms.	Malarum.	Fire Chutties.	Bows.	Mills.	Butties.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	1,196	415	358	4	41	42	25	0	1,882	1,978	1,797	5,657	59	89	109	61	259
2	37	Racherlah	549	225	118	5	22	27	7	0	848	857	710	2,415	67	105	101	42	248
3	62	Vejiaghery Velchal	1,214	520	389	4	12	50	22	0	2,046	2,099	2,255	6,400	106	166	192	144	502
4	41	Nunthaghere Nameleconda	496	199	198	1	0	16	11	0	797	833	949	2,579	15	21	18	13	52
5	31	Korootla	659	125	256	4	10	25	17	0	1,059	1,152	905	3,116	18	19	20	10	49
6	37	Sanegurum	626	348	217	3	1	25	7	0	902	968	949	2,819	13	16	19	15	50
7	50	Thevecondah	430	137	152	0	8	18	20	0	589	574	574	1,737	1	1	0	0	1
8	30	Polass	98	26	53	0	5	8	6	0	129	142	191	462	1	1	0	0	1
9	22	Anthagery	241	94	69	1	0	10	2	0	346	363	351	1,060	4	6	5	1	12
10	21	Vempully	163	37	69	0	10	14	8	0	187	187	153	527	2	2	1	2	5
11	10	Namapully	119	43	48	0	3	6	1	0	162	180	186	528	3	4	2	2	8
12	12	Koarum	174	66	70	0	0	10	2	0	204	220	300	724	3	5	5	2	12
13	25	Moncondoor	639	220	183	3	28	27	11	0	1,080	1,099	1,037	3,216	58	106	89	78	273
14	11	Velthe	167	58	45	1	10	7	6	0	229	236	243	708	8	15	15	4	34
15	51	Yamulvadah	788	131	337	8	5	41	25	0	1,162	1,270	1,044	3,476	32	39	47	43	129
16	18	Velloolah	639	65	269	2	12	23	9	0	998	1,101	857	2,956	21	33	37	22	92
17	19	Noostlapoorum	388	83	89	2	5	12	5	0	526	574	693	1,793	2	4	2	1	7
18	29	Arsekotah	202	67	70	0	0	10	8	0	272	268	254	794	0	0	0	0	0
		Total	8,788	2,859	2,990	38	172	371	192	0	13,418	14,101	13,448	40,967	413	632	662	440	1,734
	51	Jagheer Villages	1,418	479	477	16	44	39	21	0	2,872	3,000	2,617	8,489	706	1,091	1,156	890	3,137
		Grand Total	10,206	3,338	3,467	54	216	410	213	0	16,290	17,101	16,065	49,456	1,119	1,723	1,818	1,330	4,871

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	KOOSHBASH.														
			KOONBEES.					TELINGAS.					MUSSULMEN.				
			Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor……… } Nizambad……… }	18	25	25	22	72	51	65	67	66	198	49	64	57	45	166
2	37	Racherlah………	61	85	83	54	222	0	0	0	0	0	75	114	115	94	323
3	62	Vejiaghery Velchal………	51	82	90	86	258	231	320	327	329	976	64	105	105	117	327
4	41	Nunthaghere Namelecondah………	6	9	10	12	31	50	64	72	51	187	3	6	5	3	14
5	31	Korootla………	1	1	1	2	4	0	0	0	0	0	97	163	203	133	499
6	37	Sanegurum………	96	126	134	173	433	0	0	0	0	0	34	57	47	37	141
7	50	Thevecondah………	36	39	40	45	124	0	0	0	0	0	11	13	11	9	33
8	30	Polass………	5	7	7	8	22	0	0	0	0	0	16	17	25	18	60
9	22	Anthagery………	8	9	8	9	26	0	0	0	0	0	12	18	16	2	36
10	21	Vempully………	1	1	1	3	5	67	71	81	67	219	0	0	0	0	0
11	10	Namapully………	0	0	0	0	0	25	35	31	35	101	8	14	14	5	33
12	12	Koarum………	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor………	7	9	9	8	26	10	13	14	15	42	95	185	147	173	505
14	11	Velthe………	1	1	1	0	2	28	36	36	38	110	33	65	104	55	224
15	51	Yamulvadah………	3	7	6	2	15	0	0	0	0	0	11	14	19	11	44
16	18	Velloolah………	0	0	0	0	0	51	77	68	60	205	41	79	78	57	214
17	19	Noostlapoorum………	0	0	0	0	0	34	38	40	56	134	32	38	38	55	131
18	29	Arsekotah………	0	0	0	0	0	31	44	41	38	123	0	0	0	0	0
		Total………	294	401	415	424	1,240	578	763	777	755	2,295	581	952	984	814	2,750
	51	Jagheer Villages………	154	190	240	175	605	30	32	44	68	144	405	560	699	95	1,354
		Grand Total………	448	591	655	599	1,845	608	795	821	823	2,439	986	1,512	1,683	909	4,104

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	KOOSHBASH. BEARERS. Houses.	Men.	Women.	Children.	Total.	DANCING GIRLS. Houses.	Men.	Women.	Children.	Total.	GENTOO SCHOOL MASTERS. Houses.	Schools.	Masters.	Women.	Total.	SATHANIES. Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	52	75	75	57	207	8	5	19	5	29	5	5	6	7	13	25	35	39	25	99
2	37	Racherlah	85	105	114	116	335	6	6	15	2	23	1	1	1	0	1	13	21	26	22	69
3	62	Vejiaghery Velchal	77	103	106	138	347	3	6	5	10	21	0	0	0	0	0	30	41	49	54	144
4	41	Nunthaghere Nameleconda	0	0	0	0	0	3	3	9	8	20	0	0	0	0	0	6	11	11	16	38
5	31	Korootla	116	141	158	152	451	5	1	8	3	12	2	2	2	6	8	37	47	47	52	146
6	37	Sanegurum	22	28	31	47	106	3	4	8	5	17	5	5	5	0	5	12	17	20	25	62
7	50	Thevecondah	75	99	95	65	259	0	0	0	0	0	0	0	0	0	0	9	11	10	7	28
8	30	Polass	10	10	15	15	40	0	0	0	0	0	0	0	0	0	0	1	1	1	4	6
9	22	Anthagery	94	116	118	101	335	1	0	1	0	1	0	1	1	0	1	6	13	11	7	31
10	21	Vempully	52	53	50	46	149	4	5	9	1	15	1	1	1	0	1	13	13	14	7	34
11	10	Namapully	0	0	0	0	0	1	3	4	2	9	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	2	7	14
13	25	Moncondoor	61	92	99	96	287	14	21	37	36	94	4	4	5	10	15	22	30	31	19	80
14	11	Velthe	2	3	4	4	11	0	0	0	0	0	2	2	3	3	6	12	15	15	14	44
15	51	Yamulvadah	78	102	101	111	314	2	0	3	0	3	1	1	1	1	2	21	29	34	23	86
16	18	Velloolah	305	378	417	378	1,173	6	5	17	8	30	5	4	10	9	19	18	28	28	15	71
17	19	Noostlapoorum	3	5	7	4	16	0	0	0	0	0	0	0	0	0	0	5	7	9	8	24
18	29	Arsekotah	36	50	45	48	143	1	0	2	0	2	0	0	0	0	0	0	0	0	0	0
		Total	1,068	1,360	1,435	1,378	4,173	57	59	137	80	276	26	26	35	36	71	233	324	347	305	976
	51	Jagheer Villages	187	304	308	278	890	21	23	64	30	117	12	14	17	0	17	25	35	36	32	103
		Grand Total	1,255	1,664	1,743	1,656	5,063	78	82	201	110	393	38	40	52	36	88	258	359	383	337	1,079

Number.	Number of Villages.	Names of the Purgunnahs and Talooks.	Kooshbash. Jungums. Houses.	Men.	Women.	Children.	Total.	Total. Houses.	Men.	Women.	Children.	Total.	Zemindars. Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad }	27	47	49	41	137	52	82	88	66	236	0	0	0	0	0
2	37	Racherlah	23	29	31	27	87	36	50	57	49	156	131	177	185	132	494
3	62	Vejiaghery Velchal	39	71	62	68	201	69	112	111	122	345	0	0	0	0	0
4	41	Nunthaghere Nameleconda	21	34	37	28	99	27	45	48	44	137	0	0	0	0	0
5	31	Korootla	21	27	35	36	98	58	74	82	88	244	0	0	0	0	0
6	37	Sanegurum	26	29	35	29	93	38	46	55	54	155	0	0	0	0	0
7	50	Thevecondah	9	9	9	11	29	18	20	19	18	57	31	40	42	33	115
8	30	Polass	5	6	8	2	16	6	7	9	6	22	0	0	0	0	0
9	22	Anthagery	9	10	14	13	37	15	23	25	20	68	0	0	0	0	0
10	21	Vempully	7	6	9	5	20	20	19	23	12	54	8	9	5	5	19
11	10	Namapully	17	25	21	34	80	17	25	21	34	80	19	18	19	19	56
12	12	Koarum	2	3	3	2	8	5	8	5	9	22	0	0	0	0	0
13	25	Moncondoor	17	34	32	32	98	39	64	63	51	178	0	0	0	0	0
14	11	Velthe	3	5	6	4	15	15	20	21	18	59	0	0	0	0	0
15	51	Yamulvadah	46	62	66	46	174	67	91	100	69	260	182	232	218	203	653
16	18	Velloolah	31	41	43	17	101	49	69	71	32	172	0	0	0	0	0
17	19	Noostlapoorum	1	2	3	2	7	6	9	12	10	31	0	0	0	0	0
18	29	Arselkotah	6	7	8	9	24	6	7	8	9	24	0	0	0	0	0
		Total	310	447	471	406	1,324	543	771	818	711	2,300	371	476	469	392	1,337
	51	Jagheer Villages	84	129	148	92	369	109	164	184	124	472	98	163	154	95	412
		Grand Total	394	576	619	498	1,693	652	935	1,002	835	2,772	469	639	623	487	1,749

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	KOOSHBASH.														
			VILLAGE PEONS.					ELMAS.					DHERS.				
			Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	72	100	108	71	279	0	0	0	0	0	0	0	0	0	0
2	37	Racherlah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	62	Vejiaghery Velchal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	41	Nunthaghere Nameleconda	116	165	172	177	514	4	9	12	2	23	152	211	211	222	644
5	31	Korootla	163	200	220	197	617	4	8	9	12	29	0	0	0	0	0
6	37	Sanegurum	32	23	38	33	94	1	2	4	5	11	17	24	20	30	74
7	50	Thevecondah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	30	Polass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	0	0	0	0	0	4	5	4	4	13	0	0	0	0	0
10	21	Vempully	10	10	9	5	24	0	0	0	0	0	0	0	0	0	0
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	25	30	31	47	108	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor	23	39	26	28	93	1	1	1	0	2	103	150	127	123	400
14	11	Velthe	3	1	3	2	6	0	0	0	0	0	35	41	43	45	129
15	15	Yamulvadah	14	16	17	8	41	18	18	19	22	59	0	0	0	0	0
16	18	Velloolah	139	172	204	182	558	13	21	22	18	61	9	11	11	2	24
17	19	Noostlapoorum	10	11	13	14	38	43	70	68	65	203	0	0	0	0	0
18	29	Arsekotah	3	6	3	1	10	0	0	0	0	0	48	60	63	33	156
		Total	610	773	844	765	2,382	88	134	139	128	401	364	497	475	455	1,427
	51	Jagheer Villages	0	0	0	0	0	4	6	4	4	14	0	0	0	0	0
		Grand Total	610	773	844	765	2,382	92	140	143	132	415	364	497	475	455	1,427

Number.	No. of Villages.	Names of the Purgunnahs and Talooks.	Kooshbash Grand Total. Houses.	Schools.	Men.	Women.	Children.	Total.	Grand Total of Mothurpha and Kooshbash. Houses.	Dookans.	Looms.	Malarum.	Fire Chutties.	Bows.	Mills.	Schools.	Butties.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor, Nizambad	366	5	511	555	393	1,459	1,562	415	358	4	41	42	25	5	0	2,393	2,533	2,190	7,116
2	37	Racherlah	462	1	643	670	489	1,802	1,011	225	118	5	22	27	7	1	0	1,491	1,527	1,199	4,217
3	62	Vejiaghery Velchal	601	0	894	936	946	2,776	1,815	520	389	4	12	50	22	0	0	2,940	3,035	3,201	9,176
4	41	Nunthaghere Nameleconda	376	0	533	557	532	1,622	872	199	198	1	0	16	11	0	0	1,330	1,390	1,481	4,201
5	31	Korootla	464	2	609	707	597	1,913	1,123	125	256	4	10	25	17	2	0	1,668	1,859	1,502	5,029
6	37	Sanegurum	261	5	331	356	399	1,086	887	348	217	3	1	25	7	5	0	1,233	1,324	1,348	3,905
7	50	Thevecondah	172	0	212	207	170	589	602	137	152	0	8	18	20	0	0	801	781	744	2,326
8	30	Polass	38	0	42	56	47	145	136	26	53	0	5	8	6	0	0	171	198	238	607
9	22	Anthagery	138	1	178	177	137	492	379	94	69	1	0	10	2	1	0	524	540	488	1,552
10	21	Vempully	165	1	171	179	141	491	328	37	69	0	10	14	8	1	0	358	366	294	1,018
11	10	Namapully	73	0	99	91	97	287	192	43	48	0	3	6	1	0	0	261	271	283	815
12	12	Koarum	33	0	43	41	58	142	207	66	70	0	0	10	2	0	0	247	261	358	866
13	25	Moncondoor	415	4	685	622	608	1,915	1,054	220	183	3	28	27	11	4	0	1,765	1,721	1,645	5,131
14	11	Velthe	127	2	185	230	166	581	294	58	45	1	10	7	6	2	0	414	466	409	1,289
15	51	Yamulvadah	408	1	520	531	469	1,520	1,196	131	337	8	5	41	25	1	0	1,682	1,801	1,513	4,996
16	18	Velloolah	639	4	855	934	759	2,548	1,278	65	269	2	12	23	9	4	0	1,853	2,035	1,616	5,504
17	19	Noostlapoorum	130	0	175	180	205	560	518	83	89	2	5	12	5	0	0	701	754	898	2,353
18	29	Arsekotah	125	0	167	162	129	458	327	67	70	0	0	10	8	0	0	439	430	383	1,252
		Total	4,993	26	6,853	7,191	6,342	20,386	13,781	2,859	2,990	38	172	371	192	26	0	20,271	21,292	19,790	61,353
	51	Jagheer Villages	1,726	13	2,550	2,853	1,931	7,334	3,244	479	477	16	44	39	21	13	0	5,422	5,853	4,548	15,823
		Grand Total	6,719	39	9,403	10,044	8,273	27,720	17,025	3,338	3,467	54	216	410	213	39	0	25,693	27,145	24,338	77,176

Number.	No. of Villages.	Names of the Purgunnahs and Talooks.	Grand Total of Mothurpha, Meerasdars, Cultivators and Kooshbash.											
			Houses.	Dookans.	Looms.	Malarum.	Fire Chutties.	Bows.	Mills.	Schools.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor / Nizambad	3,669	415	358	4	41	42	25	5	5,765	6,082	5,295	17,142
2	37	Racherlah	2,355	225	118	5	22	27	7	1	3,765	3,888	2,880	10,533
3	62	Vejiaghery Velchal	3,713	520	389	4	12	50	22	0	6,329	6,643	6,960	19,932
4	41	Nunthaghere Nameleconda	1,849	199	198	1	0	16	11	0	3,066	3,170	3,277	9,513
5	31	Korootla	2,239	125	256	4	10	25	17	2	3,431	3,757	3,111	10,299
6	37	Sanegurum	1,674	348	217	3	1	25	7	5	2,561	2,784	2,701	8,046
7	50	Thevecondah	1,753	137	152	0	8	18	20	0	2,500	2,481	2,252	7,233
8	30	Polass	1,043	26	53	0	5	8	6	0	1,339	1,385	1,592	4,316
9	22	Anthagery	794	94	69	1	0	10	2	1	1,107	1,111	1,047	3,265
10	21	Vempully	1,054	37	69	0	10	14	8	1	1,204	1,249	1,111	3,564
11	10	Namapully	408	43	48	0	3	6	1	0	586	605	681	1,872
12	12	Koarum	507	66	70	0	0	10	2	0	648	699	942	2,289
13	25	Moncondoor	2,055	220	183	3	28	27	11	4	3,519	3,476	3,307	10,302
14	11	Velthe	623	58	45	1	10	7	6	2	914	974	925	2,813
15	51	Yamulvadah	3,186	131	337	8	5	41	25	1	4,937	5,104	4,168	14,209
16	18	Velloolah	2,054	65	269	2	12	23	9	4	3,319	3,476	2,647	9,442
17	19	Noostlapoorum	1,136	83	89	2	5	12	5	0	1,760	1,811	2,021	5,592
18	29	Arsekotah	856	67	70	0	0	10	8	0	1,217	1,204	1,064	3,485
		Total	30,968	2,859	2,990	38	172	371	192	26	47,967	49,899	45,981	1,43,847
	51	Jagheer Villages	6,329	619	818	24	50	81	47	13	10,875	11,476	9,069	31,420
		Grand Total	37,297	3,478	3,808	62	222	452	239	39	58,842	61,375	55,050	1,75,267

Number.	No. of Villages.	Names of the Purgunnahs and Talooks.	Paddy. No. of Fields.	Paddy. Quantity Sown. Candies.	Paddy. Quantity Sown. Maunds.	Paddy. Quantity Sown. Seers.	Paddy. Quantity Produced. Candies.	Paddy. Quantity Produced. Maunds.	Paddy. Quantity Produced. Seers.	Paddy. Amount. Rupees.	Paddy. Amount. Annas.	Paddy. Amount. Pice.	Jowaree. No. of Fields.	Jowaree. Quantity Sown. Candies.	Jowaree. Quantity Sown. Maunds.	Jowaree. Quantity Sown. Seers.	Jowaree. Quantity Produced. Candies.	Jowaree. Quantity Produced. Maunds.	Jowaree. Quantity Produced. Seers.	Jowaree. Amount. Rupees.	Jowaree. Amount. Annas.	Jowaree. Amount. Pice.
1	45	Havalee Kutcoor / Nizambad	2,680¼	319	6	22	2,048	6	0	20,491	5	0	1,242¼	10	16	29	351	7	20	3,059	2	0
2	37	Racherlah	1,370	172	14	37	1,574	3	13	20,628	11	0	125	1	9	38	26	14	4	402	4	0
3	62	Vejiaghery Velchal	3,869	369	8	0	1,893	10	0	18,937	8	0	4,453	56	10	25	626	0	0	6,357	4	0
4	41	Nunthaghere Nameleconda	1,043	78	1	26	389	10	10	5,629	1	9	0	0	0	0	161	0	0	2,575	8	9
5	31	Korootla	1,622	92	19	31	1,075	5	0	8,442	5	0	0	0	0	0	55	7	3	887	5	0
6	37	Sanegurum	1,275	127	10	0	809	0	0	8,477	0	0	15	0	3	30	3	15	0	2,060	0	0
7	50	Thevecondah	127	8	18	0	83	0	0	1,661	0	0	223	8	10	0	145	10	0	4,636	0	0
8	30	Polass	362	21	10	18	229	10	8	4,570	8	0	129	1	11	36	32	1	8	1,067	0	0
9	22	Anthagery	259	23	1	20	198	10	0	4,570	8	0	0	0	0	0	32	6	7	515	0	0
10	21	Vempully	792	48	4	20	297	5	1	4,761	6	0	189½	3	11	4	56	15	0	1,134	12	0
11	10	Namapully	369½	36	19	0	436	5	0	2,566	4	0	53	0	11	38	20	10	0	294	0	0
12	12	Koarum	218	21	17	6	258	9	7	1,856	11	3	0	0	0	0	31	18	30	511	10	3
13	25	Moncondoor	1,580	129	12	0	779	13	32	13,480	7	0	795	3	12	16	143	3	33	2,961	8	0
14	11	Velthe	408	33	7	0	188	1	0	3,352	0	0	89½	0	9	35	16	1	20	350	0	0
15	51	Yamulvadah	1,768½	141	8	0	1,396	2	11	15,289	0	0	1,141¼	11	17	21	252	2	29	2,906	7	9
16	18	Velloolah	1,569½	83	13	27	604	12	1	10,148	0	9	1,270¼	8	4	6	102	8	26	2,048	11	5
17	19	Noostlapoorum	1,188	98	15	38	370	18	32	5,685	0	0	363	8	17	36	36	9	36	724	0	0
18	29	Arsekotah	210¾	9	14	25	53	15	12	1,163	11	2	253	0	18	20	63	11	0	1,093	1	1
		Total	20,711½	1,817	2	30	13,685	17	7	1,49,664	7	5	10,341¾	117	6	14	2,157	2	16	33,583	10	3
	51	Jagheer Villages	3,143	191	11	5½	1,256	7	20	18,219	6	3	1,051½	13	3	12½	149	17	11½	3,660	2	0
		Grand Total	23,854½	2,008	13	35½	14,942	4	27	1,67,883	13	8	11,393¼	130	9	26½	2,306	19	27½	37,243	12	3

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND REVENUE. KUNGONEE. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.	SAMAH. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas	Amount. Pice.
1	45	Havalee Kutcoor .... Nizambad	17	0	2	19	1	9	0	13	4	0	578¼	14	10	17	109	9	36	873	1	0
2	37	Racherlah	27	0	5	28	6	0	22	40	13	0	209	5	4	39	49	12	4	525	10	0
3	62	Vejiaghery Velchal	115½	0	14	8½	12	1	30	109	3	0	587	3	13	32	57	11	10	460	2	0
4	41	Nunthaghere Nameleconda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	18	0	289	7	9
5	31	Korootla	0	0	0	0	4	17	0	46	10	0	0	0	0	0	38	14	0	402	12	0
6	37	Sanegurum	0	0	0	0	10	18	0	109	0	0	10	0	5	0	2	10	0	292	0	0
7	50	Thevecondah	5	0	1	12	1	10	0	15	0	0	95	1	12	29	46	10	0	465	0	0
8	30	Polass	0	0	0	0	0	0	0	0	0	0	70	0	9	7	7	19	20	152	8	0
9	22	Anthagery	0	0	0	0	1	0	0	10	0	0	0	0	0	0	23	6	0	213	0	0
10	21	Vempully	0	0	0	0	0	0	0	0	0	0	48	0	11	32	5	8	32	84	0	0
11	10	Namapully	40	0	16	20	19	0	0	95	0	0	83	2	1	12	21	17	0	107	8	0
12	12	Koarum	0	0	0	0	1	2	0	11	6	0	0	0	0	0	13	14	0	123	15	0
13	25	Moncondoor	5	0	0	9	0	5	13	19	0	0	215	1	13	16	15	10	15	348	8	0
14	11	Velthe	0	0	0	0	0	0	0	0	0	0	35½	0	8	9	6	4	20	254	0	0
15	51	Yamulvadah	7½	0	0	34	0	13	16	7	2	9	470½	5	16	3	94	0	22	828	8	9
16	18	Velloolah	365	4	14	9	39	18	6	535	11	6	202¾	1	9	12	27	13	4	230	11	7
17	19	Noostlapoorum	0	0	0	0	0	0	0	0	0	0	276	3	19	22	16	13	34	324	12	0
18	29	Arsekotah	0	0	0	0	0	0	0	0	0	0	63	0	10	5	11	13	13	123	11	3
		Total	582	6	15	19½	98	15	7	1,012	2	3	2,943	42	5	35	596	6	10	6,099	3	4
	51	Jagheer Villages	11½	0	4	0	1	17	0	20	14	0	434	2	19	16	53	14	21	854	15	0
		Grand Total	593½	6	19	19½	100	12	7	1,033	0	3	3,377	45	5	11	650	0	31	6,954	2	4

Number.	No. of Villages	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND REVENUE. INDIAN CORN. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.	WHEAT. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.
1	45	Havalee Kutcoor / Nizambad	199½	1	14	15	39	3	22	346	14	0	23½	0	3	39	1	17	20	66	3	0
2	37	Racherlah	26	0	6	38	9	11	4	109	8	0	0	0	0	0	0	0	0	0	0	0
3	62	Vejiaghery Velchal	1,048	13	1	20	151	4	0	1,265	14	0	0	0	0	0	0	0	0	0	0	0
4	41	Nunthaghere Nameleconda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	30	29	0	0
5	31	Korootla	0	0	0	0	71	2	0	711	5	0	0	0	0	0	0	9	24	21	12	0
6	37	Sanegurum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	50	Thevecondah	98	1	6	10	27	0	0	540	0	0	0	0	0	0	0	0	0	0	0	0
8	30	Polass	293	1	13	12	28	15	0	595	10	0	1	0	0	30	0	2	0	8	0	0
9	22	Anthagery	0	0	0	0	1	0	0	10	0	0	0	0	0	0	0	14	8	32	0	0
10	21	Vempully	228	2	2	12	36	10	10	490	13	0	0	0	0	0	0	0	0	0	0	0
11	10	Namapully	48	0	15	24	14	0	0	70	0	0	24	0	9	0	3	12	0	56	0	0
12	12	Koarum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	90	11	4
13	25	Moncondoor	116	1	6	6	4	15	31	202	8	0	12	0	1	28	0	10	9	41	8	0
14	11	Velthe	27	0	6	4	3	13	1	80	8	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	120½	1	9	8	22	2	0	458	9	6	5	0	1	22	1	3	16	27	2	0
16	18	Velloolah	143¾	1	19	20	36	16	24	606	9	0	0	0	0	0	0	0	0	0	0	0
17	19	Noostlapoorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	217	1	12	28	59	10	14	572	8	6	0	0	0	0	0	0	0	0	0	0
		Total	2,564¾	27	13	37	505	3	26	6,060	11	0	65½	0	16	39	11	3	27	372	4	4
	51	Jagheer Villages	25¼	1	12	11	14	4	38	309	13	1	115¾	4	12	0	4	12	37	208	12	0
		Grand Total	2,590	29	6	8	519	8	24	6,370	8	1	181¼	5	8	39	15	16	24	581	0	4

Number.	No. of Villages.	Names of the Purgunnahs and Talooks.	LAND REVENUE. CHENNAH. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.	MUSSOOR. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.
1	45	Havalee Kutcoor……… Nizambad……… }	97	1	15	18	14	19	0	292	8	0	0	0	0	0	0	0	0	0	0	0
2	37	Racherlah………	22	0	19	37	4	15	0	84	4	0	18	0	5	12	2	19	4	37	7	0
3	62	Vejiaghery Velchal………	79	2	12	20	12	17	8	210	8	0	0	0	0	0	0	0	0	0	0	0
4	41	Nunthaghere Nameleconda………	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	31	Korootla………	0	0	0	0	29	0	0	434	7	0	0	0	0	0	0	0	0	0	0	0
6	37	Sanegurum………	0	0	0	0	10	0	0	150	0	0	0	0	0	0	0	0	0	0	0	0
7	50	Thevecondah………	14	0	9	5	4	7	0	174	0	0	0	0	0	0	0	0	0	0	0	0
8	30	Polass………	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery………	0	0	0	0	1	7	0	20	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully………	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	10	Namapully………	29	0	15	8	12	5	0	147	0	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum………	0	0	0	0	9	12	30	144	9	0	0	0	0	0	0	0	0	0	0	0
13	25	Moncondoor………	118	0	14	23	4	15	20	275	0	0	0	0	0	0	0	0	0	0	0	0
14	11	Velthe………	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah………	206	2	19	36	36	17	0	497	14	9	0	0	0	0	0	0	0	0	0	0
16	18	Velloolah………	29½	0	8	24	1	16	36	465	8	5	0	0	0	0	0	0	0	0	0	0
17	19	Noostlapoorum………	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah………	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total………	594½	10	15	11	142	12	14	2,895	11	2	18	0	5	12	2	19	4	37	7	0
	51	Jagheer Villages………	63¼	2	1	33	9	13	0	327	12	0	1	0	0	10	0	5	0	5	0	0
		Grand Total………	657¾	12	17	4	152	5	14	3,223	7	2	19	0	5	22	3	4	4	42	7	0

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND REVENUE. MOONGH. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.	THOOR. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.
1	45.	Havalee Kutcoor } Nizambad }	149¼	1	4	21	19	1	5	261	0	0	179½	1	14	10	16	11	0	231	0	0
2	37	Racherlah	71	0	19	3	10	1	8	168	6	0	0	0	0	0	0	0	0	0	0	0
3	62	Vejiaghery Velchal	130	2	11	0	19	8	30	382	8	0	371	12	10	20	67	0	0	682	8	0
4	41	Nunthaghere Nameleconda	0	0	0	0	8	5	5	247	10	9	0	0	0	0	0	0	0	0	0	0
5	31	Korootla	0	0	0	0	4	2	22	123	8	0	0	0	0	0	0	0	0	0	0	0
6	37	Sanegurum	10	0	2	0	2	0	0	270	0	0	0	0	0	0	7	1	0	142	0	0
7	50	Thevecondah	19	0	9	6	5	14	0	182	6	2	13	0	7	25	7	5	0	145	0	0
8	30	Polass	27	0	2	37	2	2	18	58	9	8	4	0	1	4	0	12	0	17	0	0
9	22	Anthagery	0	0	0	0	3	0	0	90	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	18	0	3	32	0	19	34	40	14	0	16	0	2	32	1	13	24	42	0	0
11	10	Namapully	8	0	2	8	2	0	0	24	0	0	20	0	5	0	5	0	0	40	0	0
12	12	Koarum	0	0	0	0	2	15	0	80	7	0	0	0	0	0	5	5	0	104	3	4
13	25	Moncondoor	105½	0	10	8	3	12	4	219	8	0	245½	0	11	37	12	5	1	340	0	0
14	11	Velthe	22½	0	4	32	1	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	314¾	3	12	17	42	17	32	647	12	8	21	0	6	34	3	1	0	40	4	0
16	18	Velloolah	70¾	0	16	5	6	4	23	73	8	3	0	0	0	0	0	0	0	0	0	0
17	19	Noostlapoorum	22	0	4	14	1	6	0	48	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	967¾	11	2	23	134	10	21	2,945	2	6	870	16	0	2	125	13	25	1,783	15	4
	51	Jagheer Villages	100	0	13	32	5	6	6	184	4	0	15	0	3	36	1	7	25	22	0	0
		Grand Total	1,067¾	11	16	15	139	16	27	3,129	6	6	885	16	3	38	127	1	10	2,005	15	4

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND REVENUE. RAGGY. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.	GRAM. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.
1	45	Havalee Kutcoor Nizambad	25	0	7	8	4	14	12	47	0	0	4	0	1	0	0	12	0	8	12	0
2	37	Racherlah	41¼	0	10	37	10	6	23	132	6	0	9	0	5	12	1	8	4	17	3	0
3	62	Vejiaghery Velchal	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	2	20	1	0	0
4	41	Nunthaghere Nameleconda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	30	35	14	0
5	31	Korootla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	10	0	583	10	0
6	37	Sanegurum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	50	Thevecondah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	30	Polass.	3	0	0	7	0	4	0	3	8	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	0	0	0	0	1	10	0	18	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	10	Namapully	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	0	8	0	0
12	12	Koarum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	4	0	114	8	0
13	25	Moncondoor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	11	Velthe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	240	3	3	21	40	2	20	406	15	0	0	0	0	0	0	0	0	0	0	0
16	18	Velloolah	3¾	0	0	34	0	6	36	5	4	0	254	3	3	12	15	18	0	240	12	0
17	19	Noostlapoorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	313	4	2	27	57	4	11	613	1	0	271	3	11	24	65	1	14	1,009	11	0
	51	Jagheer Villages	6¼	0	2	6	0	11	10	8	2	0	18¾	0	12	39½	1	19	11	12	0	0
		Grand Total	319¼	4	4	33	57	15	21	621	3	0	289¾	4	4	23½	67	0	25	1,021	11	0

Number.	No. of Villages.	Names of the Purgunnahs and Talooks.	Land Revenue. Cotton. No. of Fields.	Cotton. Quantity Sown. Candies.	Cotton. Quantity Sown. Maunds.	Cotton. Quantity Sown. Seers.	Cotton. Quantity Produced. Candies.	Cotton. Quantity Produced. Maunds.	Cotton. Quantity Produced. Seers.	Cotton. Amount. Rupees.	Cotton. Amount. Annas.	Cotton. Amount. Pice.	Hemp. No. of Fields.	Hemp. Quantity Sown. Candies.	Hemp. Quantity Sown. Maunds.	Hemp. Quantity Sown. Seers.	Hemp. Quantity Produced. Candies.	Hemp. Quantity Produced. Maunds.	Hemp. Quantity Produced. Seers.	Hemp. Amount. Rupees.	Hemp. Amount. Annas.	Hemp. Amount. Pice.
1	45	Havalee Kutcoor / Nizambad	251¼	11	6	10	43	15	37	541	3	0	5	0	5	0	0	5	0	6	4	0
2	37	Racherlah	16	2	0	39	4	10	0	34	6	0	0	0	0	0	0	0	0	0	0	0
3	62	Vejiaghery Velchal	605	36	0	20	99	15	20	997	8	0	2	0	6	0	0	10	0	5	0	0
4	41	Nunthaghere Namelcconda	0	0	0	0	21	12	0	259	4	9	0	0	0	0	0	0	0	0	0	0
5	31	Korootla	0	0	0	0	52	15	0	633	9	0	0	0	0	0	6	12	0	66	8	0
6	37	Sanegurum	8	1	12	0	1	0	0	206	0	0	0	0	0	0	0	0	0	0	0	0
7	50	Theveccondah	30	0	15	30	17	5	0	276	0	0	2	0	1	30	2	0	0	20	0	0
8	30	Polass	17	0	2	36	2	9	6	40	6	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	0	0	0	0	9	18	0	118	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	177	4	18	34	42	2	10	566	8	0	34	1	15	0	22	10	0	224	8	0
11	10	Namapully	16	1	12	0	8	12	20	43	4	0	0	0	0	0	0	0	0	0	0	0
12	12	Koarum	0	0	0	0	22	10	30	271	6	0	0	0	0	0	0	10	0	5	0	0
13	25	Moncondoor	178	3	12	13	29	13	37	328	4	0	0	0	0	0	0	0	0	0	0	0
14	11	Velthe	32	1	16	8	5	7	0	49	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	243½	21	18	37	71	0	24	458	6	6	33½	2	13	20	10	18	0	106	0	0
16	18	Velloolah	429	21	0	0	61	3	14	672	2	7	0	0	0	0	0	0	0	0	0	0
17	19	Noostlapoorum	64	5	12	0	9	5	0	75	4	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	2,066¾	112	8	27	502	15	38	5,570	7	10	76½	5	1	10	43	5	0	433	4	0
	51	Jagheer Villages	140½	5	14	15	28	18	3	381	6	0	0	0	0	0	0	0	0	0	0	0
		Grand Total	2,207¼	118	3	2	531	14	1	5,951	13	10	76½	5	1	10	43	5	0	433	4	0

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND REVENUE. TOTAL. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.	TOTAL OF THE GARDEN STUFFS. No. of Fields.	Quantity Sown. Candies.	Quantity Sown. Maunds.	Quantity Sown. Seers.	Quantity Produced. Candies.	Quantity Produced. Maunds.	Quantity Produced. Seers.	Amount. Rupees.	Amount. Annas.	Amount. Pice.
1	45	Havalee Kutcoor……… } Nizambad……… }	5,451¾	363	8	8	2,651	11	32	26,237	8	0	59½	4	4	12	37	16	6	451	13	0
2	37	Racherlah………	1,934¼	185	4	0	1,700	1	6	22,180	14	0	13¼	2	1	11	39	6	22	224	1	0
3	62	Vejiaghery Velchal………	11,261½	497	9	25½	2,940	0	38	29,408	15	0	48¾	0	0	27¾	26	15	0	376	12	0
4	41	Nunthaghere Nameleconda………	1,043	78	1	26	613	4	35	9,065	15	9	0	0	0	0	4	4	0	67	15	0
5	31	Korootla………	1,622	92	19	31	1,374	14	9	12,353	11	0	0	0	0	0	31	6	0	374	15	0
6	37	Sanegurum………	1,318	129	12	30	864	4	0	11,706	0	0	65	0	0	0	33	10	0	400	0	0
7	50	Thevecondah………	626	22	11	27	340	1	0	8,114	6	2	11	0	1	28	11	1	0	93	0	0
8	30	Polass………	906	25	12	27	303	15	20	6,513	1	8	54	0	0	31½	10	7	2	213	14	0
9	22	Anthagery………	259	23	1	20	272	11	15	3,550	8	0	0	0	0	0	30	2	0	326	0	0
10	21	Vempully………	1,502½	61	10	6	463	4	31	7,344	13	0	47½	0	1	37	38	6	26	472	5	0
11	10	Namapully………	692½	44	8	30	544	1	20	3,451	0	0	5	0	0	14	12	0	0	58	0	0
12	12	Koarum………	218	21	17	6	355	3	17	3,314	7	2	0	0	0	0	15	0	20	180	3	0
13	25	Moncondoor………	3,370	141	14	36	994	5	35	18,216	3	0	28	0	6	15	46	15	32	369	4	0
14	11	Velthe………	614½	36	12	8	220	7	1	4,112	8	0	12½	0	0	32	12	0	20	105	6	0
15	51	Yamulvadah………	4,572	195	8	13	1,971	1	10	21,674	4	2	33	0	4	1	71	13	39	327	4	0
16	18	Velloolah………	4,338¼	125	9	29	896	18	10	15,026	15	0	55	3	10	2	20	8	30	350	0	2
17	19	Noostlapoorum………	1,913	117	9	30	434	13	22	6,857	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah………	743¾	12	15	38	188	9	39	2,953	0	0	35½	0	1	15	6	1	29¾	117	1	0
		Total………	42,386	2,175	8	30½	17,128	10	20	2,12,081	2	5	468	10	13	26¼	446	15	26¾	4,507	13	2
	51	Jagheer Villages………	4,805½	234	11	6½	1,528	15	22½	24,034	6	4	59¼	0	3	10	26	4	14	358	6	6
		Grand Total………	4,719½	2,409	19	37	18,657	6	2½	2,36,115	8	9	527¼	10	16	36¼	473	0	0¾	4,866	3	8

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND REVENUE.																			
			THILL.										CASTOR SEEDS.									
				QUANTITY SOWN.			QUANTITY PRODUCED.			AMOUNT.				QUANTITY SOWN.			QUANTITY PRODUCED.			AMOUNT.		
			No. of Fields.	Candies.	Maunds.	Seers.	Candies.	Maunds.	Seers.	Rupees.	Annas.	Pice.	No. of Fields.	Candies.	Maunds.	Seers.	Candies.	Maunds.	Seers.	Rupees.	Annas.	Pice.
1	45	Havalee Kutcoor / Nizambad	745	2	16	13	76	7	4	1,138	13	0	179½	1	13	3	35	2	12	444	6	0
2	37	Racherlah	29¼	0	5	10	3	17	0	46	1	0	17¾	0	5	38	3	8	4	49	12	0
3	62	Vejiaghery Velchal	1,394	11	7	30	293	2	20	4,656	0	0	185	4	5	0	22	5	20	298	4	0
4	41	Nunthaghere Nameleconda	0	0	0	0	63	2	0	945	11	0	0	0	0	0	13	17	4	207	1	6
5	31	Korootla	0	0	0	0	55	12	0	832	8	0	0	0	0	0	0	0	0	0	0	0
6	37	Sanegurum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	6	0	192	0	0
7	50	Thevecondah	145	2	4	25	34	15	0	1,080	0	0	15	0	12	0	8	0	0	320	0	0
8	30	Polass	93	0	17	38	32	8	32	1,026	0	0	0	0	0	0	0	0	0	0	0	0
9	22	Anthagery	0	0	0	0	10	18	0	163	0	0	0	0	0	0	6	4	0	93	0	0
10	21	Vempully	317	2	13	36	40	1	25	1,384	1	0	8	0	2	8	2	10	0	62	8	0
11	10	Namapully	95	1	11	32	36	0	0	247	0	0	17	0	5	32	9	5	0	70	0	0
12	12	Koarum	0	0	0	0	22	14	0	338	13	0	0	0	0	0	8	16	0	131	6	0
13	25	Moncondoor	124	3	4	4	8	1	30	263	12	0	0	0	0	0	0	0	0	0	0	0
14	11	Velthe	270	1	15	20	16	0	0	400	0	0	0	0	0	0	0	0	0	0	0	0
15	51	Yamulvadah	796¼	5	10	17	97	17	26	1,729	1	6	99½	0	19	18	20	19	12	222	9	3
16	18	Velloolah	888¾	2	2	34	35	13	25	905	1	4	22	0	6	18	1	18	12	49	11	0
17	19	Noostlapoorum	211	0	16	9	13	11	32	398	0	0	2	0	0	36	0	3	0	5	0	0
18	29	Arsekotah	125	6	2	24	7	1	24	363	12	0	0	0	0	0	0	0	0	0	0	0
		Total	5,233¼	41	9	12	847	4	18	15,917	9	10	545¾	8	10	33	144	14	24	2,145	9	9
	51	Jagheer Villages	171½	0	19	39	16	13	21	1,083	14	0	25	0	13	36	7	13	31	150	3	2
		Grand Total	5,405¾	15	9	11	863	17	39	17,001	7	10	570¾	9	4	29	152	8	15	2,295	12	11

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	LAND REVENUE. OIL RIND TOTAL.										TOBACCO.									
			No. of Fields.	QUANTITY SOWN.			QUANTITY PRODUCED.			AMOUNT.			No. of Fields.	QUANTITY SOWN.			QUANTITY PRODUCED.			AMOUNT.		
				Candies.	Maunds.	Seers.	Candies.	Maunds.	Seers.	Rupees.	Annas.	Pice.		Candies.	Maunds.	Seers.	Candies.	Maunds.	Seers.	Rupees.	Annas.	Pice.
1	45	Havalee Kutcoor } Nizambad }	924½	4	9	16	111	9	16	1,583	3	0	40½	0	0	33¼	20	18	35	401	4	0
2	37	Racherlah	47	0	11	8	7	5	4	95	13	0	5½	0	0	7½	7	11	11	140	4	0
3	62	Vejiaghery Velchal	1,579	15	12	30	315	8	0	4,954	4	0	24¼	0	0	11¼	13	10	0	239	4	0
4	41	Nunthaghere Nameleconda	0	0	0	0	76	19	4	1,152	12	6	0	0	0	0	5	10	0	107	0	0
5	31	Korootla	0	0	0	0	55	12	0	832	8	0	0	0	0	0	6	5	0	125	9	0
6	37	Sanegurum	0	0	0	0	12	6	0	192	0	0	0	0	0	0	0	0	0	0	0	0
7	50	Thevecondah	160	2	16	25	42	15	0	1,400	0	0	4	0	0	6	4	0	0	80	0	0
8	30	Polass	93	0	17	38	32	8	32	1,026	0	0	12	0	0	8¾	4	15	0	95	4	6
9	22	Anthagery	0	0	0	0	17	2	0	256	0	0	0	0	0	0	0	0	0	0	0	0
10	21	Vempully	325	2	16	4	42	11	25	1,446	9	0	8½	0	0	6¼	8	5	0	242	8	0
11	10	Namapully	112	1	17	24	45	5	0	317	0	0	4	0	0	4	6	10	0	54	8	0
12	12	Koarum	0	0	0	0	31	10	0	470	3	0	0	0	0	0	5	0	0	109	15	0
13	25	Moncondoor	124	3	4	4	8	1	30	263	12	0	9	0	5	17	18	17	0	363	12	0
14	11	Velthe	270	1	15	20	16	0	0	400	0	0	10½	0	0	12	5	0	0	90	0	0
15	15	Yamulvadah	895¾	6	9	35	118	16	38	1,951	10	9	15¼	0	0	16	23	14	15	288	10	0
16	18	Velloolah	910¾	2	9	12	37	11	37	954	12	4	0	0	0	0	0	0	0	0	0	0
17	19	Noostlapoorum	213	0	17	5	13	14	32	403	0	0	0	0	0	0	0	0	0	0	0	0
18	29	Arsekotah	125	6	2	24	7	1	24	363	12	0	0	0	0	0	0	0	0	0	0	0
		Total	5,779	50	0	5	991	19	2	18,063	3	7	133½	0	8	2	129	16	21	2,337	14	6
	51	Jagheer Villages	190½	1	13	35	24	7	12	1,234	1	2	29	0	0	17	6	3	0	251	12	0
		Grand Total	5,969½	51	14	0	1,016	6	14	19,297	4	9	162½	0	8	19	135	19	21	2,589	10	6

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	GRAND TOTAL OF THE LAND REVENUE.										MOTHURPHA. AMOUNT.			PAID IN CASH. TODDY AMOUNT.		
				QUANTITY SOWN.			QUANTITY PRODUCED.			AMOUNT.								
			No. of Fields.	Candies.	Maunds.	Seers.	Candies.	Maunds.	Seers.	Rupees.	Annas.	Pice.	Rupees.	Annas.	Pice.	Rupees.	Annas.	Pice.
1	45	Havalee Kutcoor Nizambad	6,476¼	372	2	29¼	2,821	16	9	28,673	12	0	1,308	15	0	6,312	13	0
2	37	Racherlah	2,000	187	16	26½	1,754	4	3	22,641	0	0	430	4	0	2,776	12	0
3	62	Vejiaghery Velchal	12,913½	513	3	14½	3,295	13	38	34,979	3	0	1,182	4	0	5,839	8	0
4	41	Nunthaghere Nameleconda	1,043	78	1	26	699	17	39	10,393	11	3	543	12	0	1,873	4	0
5	31	Korootla	1,622	92	19	31	1,467	17	9	13,686	11	0	933	3	0	3,901	8	0
6	37	Sanegurum	1,383	129	12	30	910	0	0	12,298	0	0	489	10	0	2,830	0	0
7	50	Thevecondah	801	25	10	6	397	17	0	9,687	6	2	174	5	6	738	4	0
8	30	Polass	1,065	26	11	25¼	351	6	14	7,848	4	2	94	1	6	848	4	0
9	22	Anthagery	259	23	1	20	318	15	15	4,132	8	0	131	2	0	1,284	0	0
10	21	Vempully	1,883½	64	8	13¼	552	8	2	9,506	3	0	357	12	0	1,689	0	0
11	10	Namapully	813½	46	6	32	607	16	20	3,880	8	0	94	6	0	815	8	0
12	12	Koarum	218	21	17	6	406	13	37	4,074	12	2	359	12	3	891	2	0
13	25	Moncondoor	3,531	145	10	32	1,068	0	17	19,212	15	0	569	6	0	3,044	8	0
14	11	Velthe	907½	38	8	32	253	7	21	4,707	14	0	99	0	0	986	0	0
15	51	Yamulvadah	5,516	202	2	25	2,185	6	22	24,241	12	11	811	7	6	2,909	8	0
16	18	Velloolah	5,304	131	9	3	954	18	37	16,331	12	0	708	0	2	2,801	8	2
17	19	Noostlapoorum	2,126	118	6	35	448	8	14	7,260	0	0	141	6	0	1,188	4	0
18	29	Arsekotah	904¼	18	19	37	201	13	12¾	3,433	13	0	151	12	0	312	0	0
		Total	48,766½	2,236	10	23¾	18,697	1	29¾	2,36,990	1	8	8,580	6	11	41,041	11	2
	51	Jagheer Villages	5,345¼	236	11	28½	1,592	3	8½	41,324	8	0	2,472	6	6	7,229	1	0
		Grand Total	54,111¾	2,473	2	12¼	20,289	4	38¼	2,78,314	9	8	11,052	13	5	48,270	12	2

Number.	Number of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	PAID IN CASH. ARRACK AMOUNT. Rupees.	Annas.	Pice.	TOTAL AMOUNT. Rupees.	Annas.	Pice.	TOWN DUTY AMOUNT. Rupees.	Annas.	Pice.	SIWAGUMMAH AMOUNT. Rupees.	Annas.	Pice.	TOTAL AMOUNT. Rupees.	Annas.	Pice.	GRAND TOTAL AMOUNT. Rupees.	Annas.	Pice.
1	45	Havalee Kutcoor.................. } Nizambad.......................... }	248	0	0	6,560	13	0	267	8	0	802	8	0	8,939	12	0	37,613	8	0
2	37	Racherlah..........................	0	0	0	2,776	12	0	540	0	0	1,135	5	0	4,882	5	0	27,523	5	0
3	62	Vejiaghery Velchal.................	9	0	0	5,848	8	0	866	13	0	192	5	0	8,089	14	0	43,069	1	0
4	41	Nunthaghere Nameleconda........	0	0	0	1,873	4	0	300	0	0	29	0	0	2,746	0	0	13,139	11	3
5	31	Korootla.............................	0	0	0	3,901	8	0	340	0	0	60	0	0	5,231	11	0	18,921	6	0
6	37	Sanegurum.........................	0	0	0	2,830	0	0	1,008	0	0	460	8	0	4,788	2	0	17,086	2	0
7	50	Thevecondah.......................	0	0	0	738	4	0	700	12	3	0	0	0	1,613	5	9	11,300	11	11
8	30	Polass................................	0	0	0	848	4	0	500	0	0	0	0	0	1,442	5	6	9,290	9	8
9	22	Anthagery..........................	0	0	0	1,284	0	0	338	0	0	300	0	0	2,053	2	0	6,185	10	0
10	21	Vempully............................	0	0	0	1,689	0	0	650	0	0	265	0	0	2,961	12	0	12,467	15	0
11	10	Namapully..........................	0	0	0	815	8	0	0	0	0	300	0	0	1,209	14	0	5,090	6	0
12	12	Koarum..............................	0	0	0	891	2	0	75	0	0	44	14	0	1,370	12	3	5,445	8	5
13	25	Moncondoor........................	0	0	0	3,044	8	0	0	0	0	320	7	0	3,934	5	0	23,147	4	0
14	11	Velthe.................................	0	0	0	986	0	0	400	0	0	28	10	0	1,513	10	0	6,221	8	0
15	51	Yamulvadah........................	981	8	0	3,891	0	0	0	0	0	22	11	0	4,725	2	6	28,966	15	5
16	18	Velloolah...........................	0	0	0	2,801	8	2	1,055	15	5	690	2	3	5,255	10	0	21,587	6	0
17	19	Noostlapoorum....................	0	0	0	1,188	4	0	110	0	0	331	0	0	1,770	10	0	9,030	10	0
18	29	Arsekotah...........................	301	0	0	613	0	0	120	0	0	1	6	0	886	2	0	4,319	15	0
		Total..................	1,539	8	0	42,581	3	2	7,272	0	8	4,983	12	3	63,417	7	0	300,407	8	0
	51	Jagheer Villages....	256	12	0	7,485	13	0	534	10	0	1,872	8	9	12,365	6	3	53,689	14	8
		Grand Total........	1,796	4	0	50,067	0	2	7,806	10	8	6,856	5	0	75,782	13	3	354,097	6	11

T. L. Bell.

Abstract of General Statistical Table showing the Total of each Division of the Population, the amount of Land Revenue, and that derived from other Taxes.

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	VILLAGES AND HAMLETS. Villages.	Hamlets.	Total.	TANKS AND WELLS. In Repair.	Out of Repair.	Total.	Moats.	PLOUGHS. Rice Ploughs.	Dry do.	Total.	CATTLE. Ploughing and Draught Cattle.	Other Cattle.	Total.
1	45	Havalee Kutcoor / Nizambad	48	51	99	550	516	1,066	562	723	802	1,525	17,543	9,330	26,873
2	37	Racherlah	37	23	60	265	228	493	275	620	370	990	8,915	3,961	12,876
3	62	Vejiaghery Velchal	62	34	96	336	271	607	310	552	967	1,519	14,667	7,800	22,467
4	41	Nunthaghere Nameleconda	41	20	61	235	576	811	235	359	516	875	11,297	8,409	19,706
5	31	Korootla	27	23	50	417	362	779	502	344	358	702	9,274	5,403	14,677
6	37	Sanegurum	36	22	58	279	561	840	394	349	419	768	10,044	4,665	14,709
7	50	Thevecondah	50	16	66	170	553	723	0	19	644	663	8,914	4,987	13,901
8	30	Polass	31	8	39	209	490	699	277	197	217	414	3,330	2,621	5,951
9	22	Anthagery	22	16	38	137	148	285	178	157	176	333	3,994	2,555	6,549
10	21	Vempully	21	8	29	221	301	522	190	201	347	548	3,129	1,471	4,600
11	10	Namapully	10	3	13	59	153	212	77	84	114	198	2,663	1,391	4,054
12	12	Koarum	13	3	16	137	467	604	147	104	175	279	3,676	1,917	5,593
13	25	Moncondoor	26	16	42	289	374	663	337	405	469	874	12,493	5,241	17,734
14	11	Velthe	11	3	14	115	85	200	113	126	124	250	3,277	2,001	5,278
15	51	Yamulvadah	53	39	92	662	621	1,283	817	841	640	1,481	13,632	7,742	21,374
16	18	Velloolah	16	23	39	750	279	1,029	3	310	317	627	5,308	3,597	8,905
17	19	Noostlapoorum	19	7	26	235	337	572	296	320	272	592	11,328	5,663	16,991
18	29	Arsekotah	37	11	48	147	219	366	50	118	399	517	3,492	1,607	5,099
		Total	560	326	886	5,213	6,541	11,754	4,763	5,829	7,326	13,155	1,46,976	80,361	2,27,337
	51	Jagheer Villages	49	46	95	736	596	1,332	730	1,004	993	1,997	25,681	13,973	39,654
		Grand Total	609	372	981	59,49	7,137	13,086	5,493	6,833	8,319	15,152	1,72,657	94,334	2,66,991

Abstract of General Statistical Table—(Continued.)

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MEERASDARS. Houses.	MEERASDARS. Men.	MEERASDARS. Women.	MEERASDARS. Children.	MEERASDARS. Total.	CULTIVATORS OR RYOTS. Houses.	CULTIVATORS OR RYOTS. Men.	CULTIVATORS OR RYOTS. Women.	CULTIVATORS OR RYOTS. Children.	CULTIVATORS OR RYOTS. Total.
1	45	Havalee Kutcoor / Nizambad	1,172	1,829	1,946	1,736	5,511	935	1,543	1,603	1,369	4,515
2	37	Racherlah	860	1,377	1,412	1,038	3,827	484	897	949	643	2,489
3	62	Vejiaghery Velchal	921	1,555	1,659	1,770	4,984	977	1,834	1,949	1,989	5,772
4	41	Nunthaghere Namelecondah	442	764	785	842	2,391	535	972	995	954	2,921
5	31	Korootla	511	745	792	704	2,241	605	1,018	1,106	905	3,029
6	37	Sanegurum	462	738	785	809	2,332	325	590	675	544	1,809
7	50	Thevecondah	513	789	781	700	2,270	638	910	919	808	2,637
8	30	Polass	323	480	531	578	1,589	574	688	656	776	2,120
9	22	Anthagery	253	346	335	341	1,022	162	237	236	218	691
10	21	Vempully	252	295	306	341	942	474	551	577	476	1,604
11	10	Namapully	142	204	210	251	665	74	121	124	147	392
12	12	Koarum	159	217	235	314	766	141	184	203	270	657
13	25	Moncondoor	512	879	906	832	2,617	489	875	849	830	2,554
14	11	Velthe	190	286	291	299	876	139	214	217	217	648
15	51	Yamulvadah	1,127	1,769	1,760	1,414	4,943	863	1,486	1,543	1,241	4,270
16	18	Velloolah	375	602	582	435	1,619	401	864	859	596	2,319
17	19	Noostlapoorum	342	575	551	594	1,720	276	484	506	529	1,519
18	29	Arsekotah	221	312	324	326	962	308	466	450	355	1,271
		Total	8,787	13,762	14,191	13,324	41,277	8,400	13,934	14,416	12,867	41,217
	51	Jagheer Villages	1,411	2,229	2,298	2,108	6,635	1,407	2,409	2,430	1,860	6,699
		Grand Total	10,198	15,991	16,489	15,432	47,912	9,807	1,6343	16,846	14,727	47,916

Abstract of General Statistical Table—(Continued.)

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	MOTHURPHA.					KOOSHBASH.					GRAND TOTAL.				
			Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.	Houses.	Men.	Women.	Children.	Total.
1	45	Havalee Kutcoor……………… / Nizambad………………	1,196	1,882	1,978	1,797	5,657	366	511	555	393	1,459	3,669	5,765	6,082	5,295	17,142
2	37	Rackerlah………………	549	848	857	710	2,415	462	643	670	489	1,802	2,355	3,765	3,888	2,880	10,533
3	62	Vejiaghery Velchal………………	1,214	2,046	2,099	2,255	6,400	601	894	936	946	2,776	3,713	6,329	6,643	6,960	19,932
4	41	Nunthaghere Nameleconda………	496	797	833	949	2,579	376	533	557	532	1,622	1,849	3,066	3,170	3,277	9,513
5	31	Korootla………………	659	1,059	1,152	905	3,116	464	609	707	597	1,913	2,239	3,431	3,757	3,111	10,299
6	37	Sanegurum………………	626	902	968	949	2,819	261	331	356	399	1,086	1,674	2,561	2,784	2,701	8,046
7	50	Thevecondah………………	430	589	574	574	1,737	172	212	207	170	589	1,753	2,500	2,481	2,252	7,233
8	30	Polass………………	98	129	142	191	462	38	42	56	47	145	1,043	1,339	1,385	1,592	4,316
9	22	Anthagery………………	241	346	363	351	1,060	138	178	177	137	492	794	1,107	1,111	1,047	3,265
10	21	Vempully………………	163	187	187	153	527	165	171	179	141	491	1,054	1,204	1,249	1,111	3,564
11	10	Namapully………………	119	162	180	186	528	73	99	91	97	287	408	586	605	681	1,872
12	12	Koarum………………	174	204	220	300	724	33	43	41	58	142	507	648	699	942	2,289
13	25	Moncondoor………………	639	1,080	1,099	1,037	3,216	415	685	622	608	1,915	2,055	3,519	3,476	3,307	10,302
14	11	Velthe………………	167	229	236	243	708	127	185	230	166	581	623	914	974	925	2,813
15	51	Yamulvadah………………	788	1,162	1,270	1,044	3,476	408	520	531	469	1,520	3,186	4,937	5,104	4,168	14,209
16	18	Velloolah………………	639	998	1,101	857	2,956	639	855	934	759	2,548	2,054	3,319	3,476	2,647	9,442
17	19	Noostlapoorum………………	388	526	574	693	1,793	130	175	180	205	560	1,136	1,760	1,811	2,021	5,592
18	29	Arsekotah………………	202	272	268	254	794	125	167	162	129	458	856	1,217	1,204	1,064	3,485
		Total………………	8,788	13,418	14,101	13,448	40,967	4,993	6,853	7,191	6,342	20,386	30,968	47,967	49,899	45,981	1,43,847
	51	Jagheer Villages………	1,668	3,372	3,530	3,017	9,919	1,843	2,865	3,218	2,084	8,167	6,329	10,875	11,476	9,069	31,420
		Grand Total………………	10,456	16,790	17,631	16,465	50,886	6,836	9,718	10,409	8,426	28,553	37,297	58,842	61,375	55,050	1,75,267

Abstract of General Statistical Table—(Continued.)

Number.	No. of Villages.	NAMES OF THE PURGUNNAHS AND TALOOKS.	AMOUNT PRODUCED LAND REVENUE.			AMOUNT OF PRODUCE. MOTHURPHA.			ARRACK AND TODDY.			TOWN DUTY AND SIWAGUMMAH.			GRAND TOTAL.		
			Rupees.	Annas.	Pice.	Rupees.	Annas.	Pice.	Rupees.	Annas.	Pice.	Rupees.	Annas.	Pice.	Rupees.	Annas.	Pice.
1	45	Havalee Kutcoor } Nizambad }	28,673	12	0	1,308	15	0	6,560	13	0	1,070	0	0	37,613	8	0
2	37	Racherlah	22,641	0	0	430	4	0	2,776	12	0	1,675	5	0	27,523	5	0
3	62	Vejiaghery Velchal	34,979	3	0	1,182	4	0	5,848	8	0	1,059	2	0	43,069	1	0
4	41	Nunthaghere Nameleconda	10,393	11	3	543	12	0	1,873	4	0	329	0	0	13,139	11	3
5	31	Korootla	13,686	11	0	933	3	0	3,901	8	0	400	0	0	18,921	6	0
6	37	Sanegurum	12,298	0	0	489	10	0	2,830	0	0	1,468	8	0	17,086	2	0
7	50	Thevecondah	9,687	6	2	174	5	6	738	4	0	700	12	3	11,300	11	11
8	30	Polass	7,848	4	2	94	1	6	848	4	0	500	0	0	9,290	9	8
9	22	Anthagery	4,132	8	0	131	2	0	1,284	0	0	638	0	0	6,185	10	0
10	21	Vempully	9,506	3	0	357	12	0	1,689	0	0	915	0	0	12,467	15	0
11	10	Namapully	3,880	8	0	94	6	0	815	8	0	300	0	0	5,090	6	0
12	12	Koarum	4,074	12	2	359	12	3	891	2	0	119	14	0	5,445	8	5
13	25	Moncondoor	19,212	15	0	569	6	0	3,044	8	0	320	7	0	23,147	4	0
14	11	Velthe	4,707	14	0	99	0	0	986	0	0	428	10	0	6,221	8	0
15	51	Yamulvadah	24,241	12	11	811	7	6	3,891	0	0	22	11	0	28,966	15	5
16	18	Velloolah	16,331	12	0	708	0	2	2,801	8	2	1,746	1	8	21,587	6	0
17	19	Noostlapoorum	7,260	0	0	141	6	0	1,188	4	0	441	0	0	9,030	10	0
18	29	Arsekotah	3,433	13	0	151	12	0	613	0	0	121	6	0	4,319	15	0
		Total	2,36,990	1	8	8,580	6	11	42,581	3	2	12,255	12	11	3,00,407	8	8
	51	Jagheer Villages	41,324	8	0	2,472	6	6	7,485	13	0	2,407	2	9	53,689	14	3
		Grand Total	2,78,314	9	8	11,052	13	5	50,067	0	2	14,662	15	8	3,54,097	6	11

THOS. L. BELL, SURGEON,
3d Nizam's Cavalry,
On Special Duty.

V. *A Catalogue of the Species of Ants found in Southern India.* By T. C. Jerdon, Esq., *Assistant Surgeon, Madras Medical Establishment. Communicated by* Walter Elliot, Esq.*

I have been induced to pen the following brief account of the Ants I have met with in Southern India, more with the view of stimulating others to record their observations on any species they may meet with, than under a sense of the value or completeness of the remarks that are to be found here. But no one, as yet, having taken the initiative, I trust that any errors in the accompanying paper will be pardoned by the scientific Entomologist at home, and that the meagre details I have given will be improved on and rendered more faithful and complete by observers in this country.

To enable any observers in this country, who may be able and willing to aid science on this subject, I shall here present them with a view of the classification of these interesting Insects by modern Entomologists, so that they may be able, in describing one which is deemed a novelty, to refer it to its place in the system, even if its real genus be not satisfactorily made out, which I fear will be too often the case, as I have experienced in my attempts at naming those described in the following pages.

Latreille in the Regne Animal of Cuvier places Ants as part of the family of the Heterogynes, of the section *Aculeata* of the order Hymenoptera, and divides them as follows :

1st, *Formica*, without sting, the antennæ inserted near the forehead, and with triangular jaws ; abdominal pedicle of only one knot or scale.

2d, *Polyergus*, also without a sting, but with the antennæ inserted near the mouth, and the jaws narrow, arched or bent ; abdominal pedicle also of one knot.

3d, *Ponera*, neuters and females with a sting ; abdominal pedicle of one knot ; antennæ thicker towards the end, jaws triangular, head somewhat triangular.

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* Much difficulty has been met with in reading the manuscript of this and the following papers, which may account for any errata that may be detected in these two papers from their very accurate and able author.—Ed.

4th, *Odontomachus*, differs from the last in the one abdominal pedicle ending superiorly in a spine; antennæ very slender and filiform in the neuters; head oblong, much notched posteriorly, jaws long, narrow, parallel, three toothed.

5th, *Myrmica*, with sting—abdominal pedicle with 2 knots, jaws triangular, maxillary palpi long.

6th, *Atta*, differ from the last only in its short palpi, head of neuters usually very large.

7th, *Cryptocerus*, also with a sting, 2 knots in the abdominal pedicle, head very large and flattened, with a cleft on each side to lodge part of the antennæ. (Peculiar to South America.)

St. Fargeau in the 1st volume on the Hymenopteres in the Suites a Buffon divides the Ants thus:

1st Tribe, Les Myrmicites, females with a sting, 1st sigment of abdomen of 2 knots. This includes the following genera.

1st Cryptocerus. 2d Atta. 3d Ocodoma. Differing from Atta in its larger head, and the presence of spines. 5th Myrmica.

2d Tribe, Les Ponerites.

Females with sting, 1st sigment of abdomen of one knot only. It includes the genera Odontoomachus and Ponera.

3d Tribe, Les Formicites.

Females without a sting. 1st sigment of the abdomen of one knot only, and it contains the genera *Polyergus* and *Formica.*

It will be, shortly, seen that many of our Ants cannot be well referred to any of these genera, but as it is probable that some new genera have been formed by recent writers, I shall in general content myself with referring most of my species to one or other of those here characterized.

Following the arrangement of St. Fargeau, we have first the tribe of *Myrmicides* and the first genus mentioned by him Cryptocerus being American exclusively, we come to the genus *Atta* of the Latreille from which St. Fargeau has separated *Ocodoma*, the chief distinction being the spines which exist either on the head or thorax of the latter, which moreover is said to have the head of variable size, whilst in Atta it is said to be usually not of a large size. We have in India species belonging apparently to both groups which I shall now endeavour to describe.

Gen. Atta.

I possess 6 species of Ants, all of small size, which appear to belong to this genus, having a sting, two knots in the first sigment of the abdomen, antennæ not concealed in a cleft, thorax without spines, and short palpi.

1. Atta Minuta, N. S.

Worker barely 1-12th of an inch long, head oblong, eyes minute, advanced; thorax narrow; abdominal pedicles long, narrow, the first much more raised than the 2d; antennæ gradually thickening of a rufous colour, with the abdomen somewhat darker or fuscous. Female about $\frac{1}{3}$d of an inch long, similar in form to the Worker, abdomen larger proportionally, and head smaller.

This minute species makes a temporary nest in various situations, in an empty box, between the back of a book and its leaves, even among the loose pages of a book, in an empty shell, &c. &c. Nothing is used in its construction, a shelter from the light merely being sought for. It is perhaps not very numerous in individuals, one wingless female is generally found in the nest. It is very common in the Carnatic and most of India, but I have not seen it in Malabar. It appears to prefer dead animal matter to saccharine or vegetable products.

2. Atta Destructor, N. S.

Worker about 5-48th of an inch long, head oblong, not so long in proportion as in the last; eyes small, more medial than in the last, antennæ short; thorax narrow, slightly grooved, abdominal pedicles long, narrow, first higher than the second, abdomen oval; colour rufous, abdomen glossy brown. I have not seen the female. They live in holes in the ground, or in walls, &c., and are very numerous in individuals. They prefer animal to vegetable substances, destroying dead insects, bird skins, &c. &c., but also feed greedily on sugar. They are common in all parts of India, and often prove very troublesome and destructive to the Naturalist.

3. Atta Domicola, N. S.

Worker about 1-6th of an inch long; head oblong, eyes moderate size, medial; antennæ rather long, jaws strongly 4 toothed, thorax

very slightly notched, abdominal pedicles narrow, first much raised, second slightly so, abdomen ovate, legs longish, head thorax and legs deep red brown, abdomen blackish. This species of Ant does not seem to be common. I have only hitherto procured it at Nellore in a hole in a house, and I only saw one kind of individual.

4. Atta Rufa, N. S.

Worker 1-8th to 1-6th of an inch long, head short, oblong, eyes rather small, medial, antennæ rather short, with the two last joints much enlarged; jaws linear oblong, strongly toothed; thorax slightly grooved, first abdominal pedicle lengthened, narrow in point, wide behind and much raised, second broader, not so high—of an uniform glossy rufous colour, with the end of the abdomen somewhat darker.

Warrior variable, about $\frac{1}{4}$th inch long, head large, very square, slightly notched behind, smooth; eyes advanced, lateral; jaws oblong, quite entire, blunt; antennæ short, otherwise as in the ordinary Worker. Female about 7-24th of an inch long, head small, diamond shaped, eyes very large, 3 large ocelli on the top of the head, antennæ *not* geniculate, short; all the joints nearly equal; thorax thick in front, depressed behind, abdomen long; oval wings reach beyond abdomen.

This Ant is the only one of the true *Atta* that has two kinds of neuter individuals, and in its form and general habits it approaches much to the next genus, Ocodoma; but as it wants the spines on the thorax I have referred it to Atta. It is very common in Malabar, but is also found in the Carnatic: it is found in holes under ground, about gravel walks, mud walls, and often appears in houses, coming through a hole or crevice in the floor, or wall. There is a colony of them in my bathing room, and every now and then vast numbers of the winged females (and males) issue forth just before sunset attended as far as the window by swarms of the neuters of both kinds. Its favorite food is dead insects and other matter, but it also carries off seeds like the Ocodoma, as I know to my cost, chaff, &c. &c. It stings very severely, leaving a burning pain that lasts for several minutes.

5. Atta Dissimilis, N. S.

About 1-10th of an inch long, head oblong, rounded; eyes moderate, antennæ suddenly thickening at the last joint, thorax very slightly grooved, abdominal pedicles narrow above, both equally raised, first rather more conic than the second; abdomen long oval, colour blackish throughout. I have only found this Ant in small numbers on trees in Malabar.

6. Atta Floricola, N. S.

Worker not 1-17th inch long; head oblong square, eyes small advanced; jaws linear, pointed, antennæ very short, last joint suddenly enlarged; thorax very slightly grooved, abdominal pedicles about equal, narrow, raised, abdomen long oval; thorax and legs dark rufous, head and abdomen glossy dark brown. I have obtained this very small Ant, of which I have only seen one kind of individual, in small numbers on flowers and leaves at Tellicherry, and it appears to feed solely on vegetable secretions.

Gen. Ocodoma.

We now come to a set of Ants extremely numerous over all India, and comprising several species very nearly alike and probably confounded together by those who have not examined them thoroughly. Almost all the species that I have seen have two kinds of neuters, one of them of very large size compared with the ordinary Workers, and which are usually called Warriors. Some points in the history of the economy of these Ants have caused much interest among Naturalists at home with regard to the food of these little creatures. The chief distinction of *Ocodoma* from *Atta* consists in the former having some small spines on the thorax.

7. Ocodoma Malabarica, N. S.

Worker $\frac{1}{8}$th of an inch long, head oval, eyes moderate, jaws rounded, triangular, pointed, and finely serrated; antennæ long and slender; thorax doubly notched and with some small tubercles especially two in the usual situation of the thoracic spines; first abdominal pedicle small and *conic*, second large, rounded; head, thorax and legs, rufous, abdomen blackish; legs long.

Warrior $\frac{1}{4}$th of an inch long; head enormous, rugose, striated, deeply notched behind; eyes minute, advanced, lateral; jaws triangular bluntly toothed, and with an appendage at thin base; thorax very rough, tubercled, with two minute rudimentary spines; first abdominal pedicle small, narrow, barely raised; second large, broad, raised, rounded; antennæ short; antennæ, legs, and abdominal pedicles rufous, the rest of the body blackish.

This species of Ant appears to form a link between the two Genera *Atta* and *Ocodoma*, as shown by the rudimentary state of the thoracic spines. I have found it chiefly about houses, it runs rapidly, lives both on insects and other animal matter, and on sugar, bread, &c. At first sight I mistook it for a small species of Formica, mentioned hereafter, Formica vagans.

8. Ocodoma Providens. (Sykes)?

Worker about $\frac{1}{7}$th of an inch long; head somewhat *ovate bulging* slightly at the sides, and narrowed behind, notched posteriorly and with two points, rough and granulous; eyes moderate, central, thorax slightly grooved with two small spines on its posterior angles; first abdominal pedicle pointed, second longer, broader and rounded; Warrior with jaws pointed and finely toothed; thorax very rough; length $\frac{1}{4}$ inch, head large, otherwise similar.

I am by no means certain if this be Sykes' species or not, and, indeed, without actual comparison, it would be very difficult to decide, so similar are the general features of these small Ants, of which I possess four very closely allied species from Southern India, and have only collected these from two or three localities, so that many other allied species may still exist.

The habits and manners of all are very similar. They live under ground, making for their size a large series of excavations. Their common food I suspect to be animal matter, dead insects, &c. &c., which at all events they take readily, but they also carry off large quantities of seeds of various kinds, especially the small grass seeds and, as every gardener knows to his cost, more especially garden seeds. They will take off cabbage, celery, radish, carrot and tomato seeds, but are particularly partial to the light lettuce seeds, and in some gardens, unless the pots in which they are sown

be suspended, or otherwise protected, the whole of the seeds sown will be removed in one night. I have also had many packets of seeds (especially lettuce) in my room completely emptied before I was aware that the Ants had discovered them. I do not know, however, if they eat them or feed their larvæ on them, though for what other purpose they carry them off I could not divine. I have often observed them bring the seeds outside their holes, as recorded by Col. Sykes, and this I think generally at the close of the rainy season, but in some cases I had reason to believe that it was merely the husks, of which I have seen quite heaps, and that the Ants did not take them back to their nests. If any of the forementioned seeds be sown out at once in a bed, most likely in the morning you will find the surface of the whole spot covered over with little ridges, the works of these creatures, and the few seeds that perhaps remain, dug all round, and being carried off, sometimes above ground, at other times under ground. Their galleries and subterranean passages are often very extensive, and it is no easy matter to dig down to their nest to see what becomes of the seeds. I have not procured the male or female of this species.

9. Ocodoma Diffusa, N. S.

Worker about $\frac{1}{8}$th of an inch long; head somewhat oval, nearly smooth, with a few scattered graundes, slightly emarginate behind; eyes moderate size; thorax deeply grooved, with two small spines posteriorly: first abdominal pedicle very pointed, conic; second rounded of equal height: head, thorax and legs rufous; abdomen brown.

Warrior $\frac{1}{4}$th inch long, jaw strongly toothed, head large, much striated, deeply notched behind; thorax more deeply grooved and tubercled; otherwise as in the Worker. This species appears to be spread over most of India, and has similar habits to the last.

10. Ocodoma Diversa, N. S.

Worker about 7-48th of an inch long, head oblong, nearly smooth, emarginate behind; eyes small; jaws triangular, toothed; thorax but slightly grooved and with two longish spines posteriorly; first abdominal pedicle broadly conic, second rounded; head thorax and legs dark marroon, abdomen blackish.

Warrior nearly $\frac{1}{3}$ inch long, head very large, nearly smoothed, slightly striated; jaws lancet, shaped, entire; eyes small, somewhat advanced, antennæ short, otherwise as in the Worker.

I procured this Ant in the Wynaad where it is not uncommon. The difference between the Worker and the Warrior is greater than in any other Indian species.

11. Ocodoma Affinis, N. S.

Worker $\frac{1}{8}$th of an inch long; head nearly square, almost smooth, with only a few striæ; eyes nearly medial, smallish; jaws triangular, with two strong teeth at the external angle of the jaw, and two smaller at the internal angle; thorax very slightly grooved, with two curved spines posteriorly, first abdominal pedicle very narrow, long, conic posteriorly, not much raised; second rounded, of equal height, broader; head, legs and thorax rufous; abdomen dusky.

Warrior nearly 7-16th of an inch long; head and jaws striated, eyes very minute, head notched anteriorly; antennæ inverted in a deep groove; metathorax elevated; no palpi apparently.

This Ant is very common in Malabar; is nearly allied to, but differs from, *O. Diversa* in the toothed jaws of the Warrior, &c. &c.

12. Ocodoma Minor, N. S.

Worker, length about 5-48th of an inch, entirely rufous, head oblong, smooth; eyes small; jaws long, somewhat triangular, toothed, last tooth prolonged; thorax slightly grooved, with two small spines in its posterior extremity; abdominal pedicles slightly raised, first long, conic; second rounded; both narrow above.

Female 5-8th of an inch long, head nearly square, slightly notched behind, three ocelli on top of head; eyes large medial, head striated with a hollow for the base of the antennæ; jaws triangular, bluntly toothed at the two angles; antennæ short; thorax much raised anteriorly, and with two small posterior spines; abdomen long, oval, large.

I, on one occasion, only, found a single individual which I presume to be the female (which had lost her wings) under a stone in my garden at Tellicherry, surrounded by numerous workers who

were busy tending her, and removing some eggs or larvæ. It is the only female I have seen of this genus, and is well characterized by its large eyes, and ocelli.

13. Ocodoma Quadrispinosa, N. S.

Worker nearly 1-8th of an inch long, head smooth ; eyes small ; thorax with two small spines anteriorly, and two large carved spines posteriorly ; first abdominal pedicle long, raised, rounded behind ; second also rounded, blunter, of equal height ; head, legs, and thorax dark rufous ; abdomen blackish brown. I have not seen the Warrior (if any) of this race, which I found during the monsoon forming a small temporary mud abode round the head of flowers of a species of Leucas, abundant in Malabar. It appeared to be feeding on the vegetable secretions surrounding the seeds.

Of these seven species of Ocodoma the first and last are very distinct from all the others, the first by having only rudimentary spines, and the last by having four spines instead of two. *Ocodoma Minor* is readily distinguished by its smaller size; and the other four are most readily distinguished inter se, by the jaws of the Warriors, which in No. 10 is entire, in 11 with two teeth at each angle ; in 9 with moderately strong teeth throughout its extent ; and in 8 with the jaw very finely toothed.

Gen. Eciton.

The characters of this genus are thus given by St. Fargeau. " Antennæ entirely free, head elongated, and the thorax without " spines ; maxillary palpi long, of 6 joints ; jaws linear ; wings " unknown." I have got four species of Ant which perhaps may be ranged under this genus, of which only one species is described, and that from South America, but it is more than probable that they will form a new genus to which however I will not attempt to impose a name. My species have a long slender body, oblong head, large eyes, short antennæ, inserted very near the mouth, linear or oblong jaws, and sting very severely.

14. Eciton ? Rufonigrum, N. S.

Worker, length about 11-24th of an inch ; head square ; antennæ short, first joint thickened ; very long palpi, eyes large, lateral,

posterior ; jaws somewhat linear, oblong, with two strong teeth at the external angle, and bluntly toothed in the rest of its extent ; thorax slightly grooved ; abdominal pedicles very little elevated, first very long ; abdomen long, ovoid ; thorax, legs, abdominal pedicles and antennæ rufous, head and abdomen black. This ant is very common in the Carnatic, less so in Malabar. It makes its nests in holes of trees, old palings, bamboo rafters and such like ; it does not care for sweets, is never seen on flowers, but devours dead animal matter. I have not seen the female. It stings very severely.

15. Eciton Nigrum, N. S.

Worker, length 9-24th of an inch, head long, eyes large, medial ; antennæ short, the first joint not being so long as the head ; jaws somewhat square, bluntly toothed ; thorax low, barely grooved ; both abdominal pedicles long, rounded, low ; abdomen long, oval ; sting very large. Colour uniform black. Female, length 11-24th of an inch, differs from the Worker only in having wings.

This Ant like the last is rare in Malabar, but tolerably common in parts of the Carnatic ; it has the same habits as the last, living in holes of trees, &c., and feeds on the same manner. I have found on cutting open a dead branch on which they had formed their nest many winged females, and larvæ and pupæ in different states of development.

16. Eciton Rufipes, N. S.

Worker, length 11-48th of an inch ; head oblong ; eyes very large, slightly advanced ; thorax considerably grooved, abdominal pedicles long, low ; abdomen long, ovate, black with rufous legs.

I have only found this species on one occasion under a stone in the Salem district, and know not if it has the dendrophilous habits of the two last.

17. Eciton Minutum, N. S.

Worker about 1-6th of an inch long, black throughout, very slender ; legs rather thick ; palpi much exposed. I regret that I have not at present a specimen of this little Ant to describe from more fully. Its general structure however is exceedingly similar to

that of its congeners, from which its small size sufficiently distinguishes it. I have found it both in the Carnatic and in Malabar, almost always on trees, but do not know if it has its nest in holes of the wood or otherwise.

Though scarce in individuals, it is by no means rare, and I hope to be able to describe it more fully hereafter.

Gen. Myrmica.

Gen : Char : Antennæ sufficiently exposed ; head triangular, without spines ; maxillary, palpi long, of six joints ; jaws triangular ; three cubital cells in the upper wings, the third incomplete, &c. Such are the characters assigned to this genus by modern authors. Whether the following species all belong to it or not I cannot decide, but judging from their differences I imagine that they form at least three groups.

In the first group I shall place two or three nearly allied species, one of which has already been described by Col. Sykes as a *Myrmica*, so that this may be considered the typical group. Of this I have what I imagine to be three species, but all very closely allied to each other.

18. Myrmica Diffusa, N. S.

Worker rather more than 1-9th inch long ; head wider than thorax, oblong, triangular, striated ; antennæ rather short, basal joint barely longer than the head, inserted near the mouth ; eyes large ; thorax notched, with two small spines on the posterior angles, curving backwards ; first abdominal pedicle longish, somewhat heart shaped, excavated, second obovate ; both very slightly raised : abdomen triangular ; head and body rufous ; abdomen dark glossy brown.

Female—head not wider than the thorax, which is not spined ; length 5-12th of an inch ; wings not so long as abdomen.

Male—head very small, eyes large ; antennæ with the first joint not elongated ; no spines on thorax, which is much raised ; wings reach beyond abdomen—length 1-7th of an inch.

This is a well known and widely diffused species, being found throughout India. It makes its nest in holes in branches of trees,

runs with its abdomen turned upwards almost over its head especially when excited, and feeds on honey and other vegetable secretions. Occasionally they appear to join their nest among the roots of Moss, Orchideæ, and various Epiphytic plants, at least this is the case in Malabar, and I cannot detect any marked difference of species, although it is possible that the two races may be distinct. It is very pugnacious, and bites very severely, not appearing to use its sting much.

19. Myrmica Rufa.

Worker, length 9-48th of an inch, head shorter, proportionally, and eyes larger; thoracic spines longer, straighter; 1st abdominal pedicle longer and less raised than in the last; entirely of a rufous colour. This is a very closely allied species and is found in the same localities as the last. Had I found it in a different tract of country I would have perhaps considered it as a climatal variety, but its large size, and the few points enumerated above lead me to view it as distinct. Its habits are similar.

20. Myrmica Kirbzii Sykes ?

I regret that I have mislaid my copy of the Entomological Transactions in which this Ant and several others were described, but the similarity of the nest and its general description led me to conclude that the species procured by me is identical with Colonel Sykes' one.

Is very closely allied to the two last, has its thorax larger, rough, and much ridged; its thoracic spines larger; first abdominal pedicle somewhat diamond shaped, second heart shaped; the abdomen strongly ridged longitudinally; head thorax and legs dark marroon; abdomen dark brown. Length 7-48th of an inch.

I have found this species chiefly in the elevated forests of the Wynaad. I cannot say that I have met it below the ghauts. It forms a considerable nest of some papyraceous materials, usually of an oval form, and placed round a small branch which supports it. It is very numerous in individuals, countless swarms issuing from it on being disturbed and boldly attacking the assailant both with teeth and sting. It feeds on honey of flowers and other vegetable secretions.

21. Myrmica Fodicus, N. S.

Worker, length 4-12th of an inch ; head rounded, triangular striated; eyes large, posterior; jaws somewhat linear, four toothed; thorax raised in front, depressed posteriorly with two small spines on each side in front, and two tubercles above these, and two large nearly horizontal spines at the posterior extremity of thorax ; first abdominal pedicle long, narrow, raised behind, second raised, rounded ; abdomen somewhat triangular ; head, thorax, legs and abdominal pedicles marroon colour, abdomen shining brown. Female, head rather smaller proportionally, finely striated ; eyes larger, three ocelli ; jaws blunt without teeth ; antennæ scarcely longer than the head; thoracic spines less developed; abdomen larger.

This is one of the most common and abundant Ants in Malabar. I do not remember to have seen it in the Carnatic. It seldom enters houses, but otherwise appears to take the place of *Formica* Indefessa, which is not found in Malabar. It feeds chiefly on honey and other vegetable secretions, but also will take dead animal matter. It also occasionally feeds on the secretions of the........ and is also found in the train of Caterpillars feeding on leaves. It makes large excavations under ground, generally having the entrance round the trunk of a tree, and it forms considerable heaps of fine earth round the mouth of the nest. It runs, unlike the last species, with its abdomen turned downwards under the abdominal pedicles. It appears to form the type of a very distinct group from the last.

22. Myrmica ? Tarda, N. S.

Worker, length 1-6th of an inch ; head somewhat triangular, square behind, of same width as thorax ; eyes rather small, quite lateral, somewhat posterior; antennæ short, thick, inserted near the mouth; thorax short, square, ending in two spines on each side; it and the head rough and shagreened ; abdominal pedicles much raised, long, narrow; abdomen triangular, also shagreened ; head, thorax, legs, abdominal pedicles brick red ; abdomen dusky, dark blue. This is a very curious looking Ant. It lives in holes in the ground in small societies, and feeds on vegetable secretions. It moves very slowly. It is found both in the Carnatic and Malabar.

23. Myrmica ? Cæca, N. S. Ocodoma ?

Worker, length 1-5th of an inch ; head somewhat oval, rather small ; no eyes ; antennæ short, thick, inserted near the mouth ; an oblique groove on each side of forehead for the laying of the antennæ ; jaws triangular, hooked at the tip, and finely serrated ; thorax narrow, of uniform width, granulose, with an elevation posteriorly ending in two small spines ; abdominal pedicles raised, rounded, pointed backwards, the first the highest ; abdomen long, oval ; head thorax and legs reddish brown ; abdomen glossy brown.

I found this curious Ant only once, under a stone in the Wynaad.

2nd Tribe. Ponerites.

The single species of Ant which I place under this head appears to correspond pretty well with the characters of the genus which have already been given.

24. Odontomachus Rufus, N. S.

Worker, length 1-4th of an inch ; head bulging at the sides, narrowed in front ; eyes of moderate size ; anterior antennæ rather long, slender ; jaws closely approached at their base, long, linear, with three strong pointed teeth at the end; thorax narrow; abdominal pedicle raised, pointed and conic ; abdomen long, oval ; head, thorax and legs rufous ; abdomen dark brown.

I obtained this Ant under stones in a jungle in the Salem district, and know nothing of its habits.

I have since obtained one individual also in the Wynaad which may be the Warrior of this species—if the society consist of different individuals. It is 11-24th of an inch long, and appears only to differ, besides its larger size, in having the eyes smaller, and more advanced, the teeth of the jaw blunt, and the thorax finely striated.

Harpegnathos, New Genus.

Gen : Char : Jaws scythe shaped, pointed, and finely serrated ; head oblong, notched behind ; eyes very large situated at the anterior extremity of the head ; antennæ rising between the eyes ; abdominal pedicle slightly raised.

I cannot class this remarkable ant as an Odontomachus, and have therefore been compelled to institute a new genus for its

reception; some of the characters given may not be generic, but till other species are discovered it is difficult to say which are, and which are not of generic value.

25. Harpegnathos Saltator, N. S.

Worker, head long, granulated; jaws with a strong tooth near the base pointing downwards and inwards, and thence gradually tapering to the tip, and finely serrated, 1-6th of an inch long; thorax barely grooved; abdominal pedicle small, low, ovate; abdomen very long; sting large; head and abdomen blackish brown, thorax and legs rufous.—Length $\frac{3}{4}$ of an inch.

I have not seen this remarkable Ant in the Carnatic. I first saw it at Tellicherry, and subsequently in other parts of Malabar. It is also found in the Mysore country as I learn from Mr. Hamilton, a most talented and industrious Amateur Entomologist.

I have given it the name of *Saltator* from its power of making most surprising jumps which it does when alarmed or disturbed. It is very pugnacious, and bites, and stings very severely. It makes its nest under ground, generally about the roots of some plant. Its society does not consist of many individuals. It appears to feed on insects, which it often seizes alive.

Gen. Ponera, Lat.

Its generic characters have been given above.

26. Ponera Sculpta, N. S.

Worker, length from 5-17th of an inch to nearly $\frac{1}{2}$ an inch; head oblong, pointed in front and rounded behind; jaws large, triangular, armed with alternately a large and a small tooth; eyes very large, nearly medial; antennæ inserted on a line just in front of the eyes, rather long; thorax nearly uniform in width and height; abdominal pedicle raised, pointing forwards, with two small spines; abdomen long, cylindric; legs long; the whole body curiously sculptured, being channeled and grooved in different directions, longitudinally, circularly, obliquely, giving a peculiar dull appearance; colour blackish green.

This is one of the commonest species of Ant in Malabar, extending from the level of the sea up to the top of the Neilgherries. It

lives in the ground in small societies, often making its nest in a flower pot, occasionally under a large stone. It does not work in concert, being generally seen solitary. It lives on animal substances, but apparently will also take vegetable matter. I have seen two fighting for a ripe seed of the Lantana.

I have not met with the female of this species.

27. Ponera Stenocheilos, N. S.

Worker, length 3-8th of an inch; head large square behind, pointed and advancing anteriorly, widest in front of the eyes which are large; antennæ long; jaws very long, linear, ending in a strong tooth externally and a smaller one at the internal angle; thorax narrow; abdominal pedicle raised, rounded, pointing backwards; abdomen very long; sting large; legs long; colour dingy greenish brown.

I have found this Ant very rarely in Malabar, and know nothing of its habits.

28. Ponera Processionalis, N. S.

Worker, length 1-3rd of an inch; head oblong, advanced anteriorly; eyes medial, large; antennæ moderately long, thickened at the end; jaws triangular, strongly four toothed; thorax wide, not grooved; abdominal pedicle of equal width with the thorax, square truncated; colour shining black.

I have met this species over most of India. It lives in the ground in very numerous societies, is most frequent in jungly district, occasionally a vast column of them, 3 or 4 deep, may be seen crossing a road, and I have traced the column for 40 and 50 yards. It stings very severely.

29. Ponera Affinis, N. S.

Worker, length 1-3rd of an inch; head oblong, notched behind, advanced anteriorly; jaws triangular, strongly toothed; antennæ thickened at the tip; eyes somewhat anterior, moderately large; thorax slightly grooved; abdominal pedicle pointed, thin; abdomen oval colour dingy black.

I have only procured this Ant once in Malabar and know nothing of its habits.

30. Ponera Rufipes, N. S.

Worker, length 9-16th of an inch; head oblong; eyes anterior, small; antennæ short and thick; jaws triangular, finely toothed; thorax not furrowed, truncated posteriorly; abdominal pedicle wide, thick, truncated, and excavated posteriorly; abdomen long, the division of the joints strongly marked; body ridged, furrowed, and channeled throughout; antennæ, legs, and end of abdomen dark rufous; rest of the body dull black.

I have procured this Ant only on one occasion, hitherto, in Malabar.

31. Ponera Pumila, N. S.

Worker, length about 1-5th of an inch; head oblong; eyes rather small, advanced; jaws triangular, strongly toothed; antennæ thickened; thorax smooth; abdominal pedicle long, square; abdomen long, cylindric; dull black, with rufous legs and antennæ.

I found this Ant in Malabar where it is rare.

Foremicites.

We now come to the last family containing those Ants that have no sting, and the abdominal pedicle of one knot only. It comprises two Genera Polyergus and Formica, but I do not think we possess any species of the former genus.

Gen. Formica.

This genus comprises two distinct forms, the one with spines on the thorax, the other unarmed, which certainly ought to form two genera, inasmuch as this distinction is made to separate Atta from Ocodoma.

1st, without spines on the thorax.

32. Formica Compressa, Fabr.?

Syn. F. Indefessa, Sykes.

Worker, length 4-10th to ½ an inch; head oblong, notched behind; eyes medial, of moderate size; jaws triangular, toothed; antennæ long; thorax widened anteriorly; abdominal pedicles somewhat diamond shaped above, much raised and thin as seen laterally; legs rufous, the rest of the body black.

Warrior, 6-10th of an inch long; differs from the ordinary Worker in the head being proportionally much larger, and the jaws having blunt teeth.

Male, length 4-10th of an inch; has a small triangular head, lateral eyes, three ocelli, the thorax raised in front, and the abdominal pedicle broader; wings do not reach to end of abdomen.

Female 5-8th of an inch long; very similar to the male, has the jaws strongly toothed, somewhat oblong; and the abdomen proportionally large.

This species well known in India, as the black Ant is found throughout every part of this country which I have traversed, except the Western Coast where I have never seen it. It appears to me that it is most probably the species described by Fabricius whose name I have accordingly adopted.

It lives in very numerous societies in the ground, the entrance to the nest being often round the trunk of a tree, or close to some building. The Warriors are very numerous. Their food is chiefly vegetable secretions, sugar, &c., and Colonel Sykes has given an interesting account of the devastations committed by them on preserves, sugar, &c., which I regret that I cannot transcribe having mislaid the volume of the transactions of the Entomological Journal in which it appeared. They bite rather severely, but the pain is quite momentary. At certain times great numbers of the winged males and females are seen at the mouth of the nest, and they remain there for several days. When they take wing, they do so in vast numbers, and always at night.

33. Formica Angusticollis, N. S.

Worker ½ an inch long; head long, oblong, ending posteriorly in a narrow neck; eyes posterior, of moderate size; jaws triangular, strongly toothed; antennæ long; thorax low, narrow, uniform; abdominal pedicle conical, high, narrow; abdomen oval; colour dull black, with antennæ and legs rufous.

Warrior, 8-12th of an inch long; head very large, notched posteriorly; eyes much smaller; otherwise similar.

I have only found this Ant in forests in Malabar and always singly.

34. Formica Smaragdina.

Worker, length about 4-10th of an inch; head long, triangular; antennæ long; eyes large, medial; jaws triangular, pointed, with sharp teeth; thorax not furrowed; abdominal pedicle, long, low, narrow, linear; legs long; colour of an uniform pale rufous.

Male 7-24th of an inch long; head diamond shaped; eyes lateral, small; thorax raised in front; abdomen small; wings reaching beyond the abdomen; of a rufous colour.

Female 7-8th of an inch long; head short, triangular; eyes lateral; three ocelli; thorax very large, wide; abdominal pedicle wide in the middle as viewed from above, very thin laterally; abdomen large; wings reaching beyond abdomen; entirely of a pale shining green colour.

This Ant is well known in Malabar, and the wooded parts of India, but is rare in the Carnatic, where I have only seen it in one or two large Mango groves.

It forms a nest of living leaves which it draws together without detaching from the branch, and unites with a fine white web; sometimes this nest is above a foot in diameter but usually smaller. The society consists of a vast number of individuals, and in large nests we find many females and males, both with and without their wings at all times of the year. They are very bold and pugnacious, and bite very severely. They live chiefly on vegetable secretions, and are very partial to the flowers and buds of some of the Loranthi, which abound so on the Western Coast, they often form a temporary web round the flowers or sometimes round the fruit of various trees, viz. the Eugenia Malaccensis, Artabothrys odorotissima, &c. apparently only for the purpose of feeding undisturbed they will however also sometimes feed on decaying animal matter. It is said that the web they form is occasionally used for writing on in the N. W. Provinces of India, and that the Ants are made uses of to destroy a nest of wasps that may have established themselves in a house. In this case they are said to destroy all the wasps but become so infuriated, that their own indiscriminate attacks are

nearly as bad as those of their foes. In gardens they are most partial to mango trees, and also to the large leaves of the Jaméi Malae, (Eugenia Malaccensis), but in the jungles they select a vast number of trees, or rather make no selection at all.

35. Formica Longipes, N. S.

Worker, length 1-5th of an inch; in form exceedingly similar to the last; head more oblong than triangular; eyes more posterior; antennæ very long; abdominal pedicle shorter, proportionally; abdomen a longer oval; legs very long of a pale rufous colour throughout, tinged with dusky on the abdomen.

This Ant is found in all the forests of India living in holes in the ground, in tolerable numerous societies, and feeding on vegetable secretions. I have not seen it at any distance from the jungles. At Tellicherry for example, I have never seen it, but as soon as you go a little inland and get into the jungle you meet with it. It is often found about bungalows and out-houses.

36. Formica Timida, N. S.

Worker, length 9-24th of an inch long; head oblong, oval; eyes large, posterior; jaws triangular, strongly toothed; thorax smooth; abdominal pedicle raised, conical; colour dingy rufous, darkest on the head, and tinged with dusky on the abdomen. All the body covered with long scattered hairs.

Warrior, ½ an inch long; differs from the ordinary Worker in the head being much larger proportionally, and notched proporteriorly; thorax thicker; and the abdomen shorter.

Female, like Worker, but somewhat larger, with wings, and 3 ocelli. Male, 7-24th of an inch long; thorax much elevated; eyes large; head small; 3 ocelli; wings reach beyond the abdomen.

I have only found this Ant on the Malabar Coast where it is very common, living chiefly on vegetable secretions. It has its nest under ground. It is very different in habit from the other large red Ant (F. Smaragdina) being most timid, and if approached or touched, dropping to the ground at once and hiding itself. It does not always confine itself to vegetable matter. On one occasion I

had a box of pigeons containing some squabs placed in a room on the floor. I next morning found several of the squabs dead covered with these Ants chiefly however the warriors.

37. Formica Stricta, N. S.

Worker, length 7-20th of an inch; head nearly square, slightly narrowed anteriorly; jaws rough, triangular, strongly toothed; eyes large, posterior; prothorax wide, metathorax narrowed; post thorax in the form of a rounded raised narrow platform, ending in two points, and truncated; abdominal pedicle blunt, rounded, raised; abdomen short, oval; antennæ rufous, head and thorax dull greenish black, shagreened; abdomen shining glaucous green; legs shining black.

I have found this Ant on flowers in Malabar, but have not seen its nest; it is not a very common species.

38. Formica Cinerascens, Fabr. ?

Worker, length 3-8th of an inch; head large, eyes rather small posterior; jaws strongly toothed; thorax wide in front, narrowed behind with 2 glands on each side above; abdominal pedicle elevated, conic; abdomen oval; colour dull black, except the abdomen, which is glaucous green, and somewhat pubescent.

Female ½ inch long nearly; head smaller, thorax not so wide; abdomen long, oval; wings not reaching to the end of abdomen.

Male 3-12th inch long; similar in form to the female, but with much narrower abdomen, and head still smaller proportionally. Warrior, 5-12th of an inch long; head large; antennæ short; eyes minute.

This species lives in the ground in small societies. I have only seen it in the Carnatic. It is described as having the head fulvous, and a triangular spot on the abdomen, but as it is said by Fabricius to have been sent from Tranquebar, in the vicinity of which I have seen our present species, I think they are probably identical, and that the difference of colour is accidental, especially as there are only two species common in the Carnatic with glaucous abdomen, this and our F. rufoglauca.

39. Formica Velox, N. S.

Worker, length 5-24th inch to 6-24th head long, oblong ; eyes posterior, large ; jaws strongly toothed ; antennæ long ; thorax smooth ; abdominal pedicle raised, somewhat rounded, wide above; abdomen with the divisions of the segments strongly marked ; legs long, colour dull blackish, with the abdomen greenish pubescent.

This Ant is very common in Malabar and I think is also found in the Carnatic. It frequents flowers, especially delighting in those that have great quantities of pollen, such as the Cucurbitaceæ, Hibisci, &c. It runs very speedily, and is very easily alarmed, dropping to the ground on being touched. I have not succeeded in finding its nest.

40. Formica Rufo-glauca, N. S.

Worker, 7-24th inch long, head long, oblong ; eyes large, posterior ; jaws strongly toothed ; thorax not grooved ; abdominal pedicle raised, conic, wide above ; abdomen fine silky glaucous green ; head, thorax and legs bright rufous.

Warrior, 9-24th inch long, head large ; eyes much smaller ; antennæ shorter ; abdominal pedicle flattened posteriorly ; abdomen short and triangular ; colour similar.

I have found this Ant only in the Carnatic in small societies living in holes in the ground.

It is possible that this may turn out to be Fabricius species *Cinerascens.*

41. Formica Vagans, N. S.

Worker, 3-24th inch long, eyes large, medial ; antennæ long ; abdominal pedicle raised rounded ; legs very long.

Female, 3-12th inch long ; the thorax shorter and wider, and abdomen very large, wings reaching beyond the abdomen.

· This little Ant is exceedingly common in the Carnatic, but I have not yet seen it on the Malabar Coast. It takes up its quarters in any sheltered spot in a house, under a box, a stone, a hole in the wall, or such like places, and when disturbed flits with great speed to another suitable spot. Its society is very numerous in individuals and there are many females and males, sometimes with, at

other times without wings. It feeds both on vegetable and animal substances preferring the former like all the true Formica.

42. Formica Assimilis, N. S.

Worker, exceedingly similar to the last.

Length, 3-24th of an inch, differs in its colour chiefly being of a shining reddish black, in its eyes being apparently large, the thorax narrower, and in being covered all over with scattered white hairs.

I have found it frequenting flowers in Malabar, but not abundant.

43. Formica Phyllophila, N. S.

Worker, length 7-48th of an inch, eyes small, anterior, jaws triangular; thorax slightly furrowed posteriorly; abdominal pedicle thin, low, linear; abdomen large triangular; legs antennæ rather short: colour shining brown black.

This little species forms a temporary nest between two leaves usually, or sometimes in a head of flowers; it lives in small societies, and feeds entirely on vegetable secretions.

44. Formica Nana, N. S.

Worker, length not 1-12th inch; eyes anterior, thorax wide; abdomen long, elliptical; head and thorax brown; antennæ, legs, and abdomen pale whity brown.

This very minute species is found in all parts of India and is very abundant in Mysore; from its very small size is noticed with difficulty. It feeds on flowers and vegetable secretion.

2ndly. With spines on the thorax.

45. Formica Indificans, N. S.

Worker, 5-24th of an inch long; head triangularly ovate, elevated; eyes moderate; jaws strongly 3 toothed; thorax wide anteriorly, narrowed behind, with two small spines anteriorly pointing forwards, and two large ones behind, pointing upwards and backwards, and two rudimentary spines or points behind and beneath these latter; abdominal pedicle square, raised with two large upright spines, and a smaller one on each side; abdomen short; head and abdomen rufous, thorax dark glossy brown.

Female 1-3d inch long, similar to the worker; 3 ocelli on top of head; wingless.

This Ant makes a small nest about ½ inch, or rather more, in diameter, of some papyraceous material, which it fixes on a leaf. I have opened two, each of which contained one female and 8 or 10 workers. It is very rare, and I have only seen it in Malabar.

46. Formica Syloicola, N. S.

Worker, 3-12th inch long; head narrowed in front, and rounded behind; eyes posterior, salient; antennæ inserted in front of the eyes, with a strong crest bordering their insertion internally; jaws short, with 5 teeth, the upper one much the longest and bent; thorax, wide; with two spines on its anterior angles, and two stronger ones posteriorly pointing backwards and upwards; abdominal pedicle large square ending behind in two large carved spines pointing backwards and outwards, and two points or tubercles behind and between them; abdomen short, oval, colour dull black, abdomen shining glaucous green.

Female, 9-24th inch long, differs in the anterior thoracic spines being apparently shorter, and in having 3 ocelli; wingless.

This Ant has the same habits as the last, but is not found except in the jungles. It appears very closely allied to *F. Nastata* of Latreilli from India, and to several other species said to be from Southern Asia; and as some of these may be found in India, I add here a brief description of them taken from St. Fargeau's work on Hymenoptera.

" *Formica Sexspinosa*, Latr. Body black, covered with a fine silky yellowish down, especially on the abdomen; head oblong; narrowed posteriorly; antennæ long; posterior angles of the head salient; jaws large triangular, with 3 or 4 teeth, eyes small globular, salient, thorax with two spines anteriorly on its lateral angles, and two on the posterior extremity pointing backwards; abdominal pedicle thick, rounder in front, truncated posteriorly with 2 spines *almost as large* as those on the posterior extremity of thorax length 7 2-3d lines (french); from Southern Asia.

" *Formica Nastata*, Latr. Black, finely shagreened and slightly hairy, head short; antennæ long; jaws short with small teeth, and a larger curved one at the end; space between the antennæ elevated with an arched crest on each side; eyes small, round; thorax cubical, compressed, its surface flat and the ridge on each side sharp, anteriorly wide and square with a spine on each side at the

numeral angles strong, sharp, straight, and reaching to the head; its posterior part truncated with a strong spine at each angle pointing obliquely upwards; abdominal pedicle large triangular, with its upper edge concave a small tooth in the middle, and a strong arched spine on its lateral angles directed backwards, with a little tooth beneath each.

Length 4 lines. Hab. India.

"*Formica relucens,* Latr. Exceedingly like the last. *(F. Nustata,)* differs in the following points—body covered with silky, golden, shining down, with a few larger hairs; thorax with two spines anteriorly and none posteriorly; abdominal pedicle with 4 spines, the upper ones nearly straight; length 4 lines. From Southern Asia.

"*Formica Ammon,* Latr. Very like the two last, body black, striated, with a few hairs; thorax ashy; anterior angles advanced; posteriorly the lateral angles prolonged into a large, straight spine, pointing backwards; abdominal pedicle large, triangular; with the upper angles prolonged into a very long curved spine, directed backwards; abdomen covered with a silky golden down—length 2 1-5th lines. From Southern Asia.

"*Formica carinata,* Fabr. Head rounded, black; thorax black, divided into three by two deep transverse lines; the anterior portion with a spine on each side directed forwards; and the posterior part with two small straight spines; abdominal pedicle large, square with two raised sharp bent spines. Length? of medium size. Southern Asia."

I have very little doubt but that many more species of Ants will be discovered even in the Southern portion of the Peninsula, and I hope myself to add others to the present list, and more especially to gain additional information on their habits. If any of the readers of this Journal are inclined to assist me in this undertaking and are able to furnish me with any details on the economy of any species, I shall be very glad to receive all information and record it in a Supplement, which I will publish as soon as I can collect sufficient materials; and as there may be some difficulty in making out the species, especially if the observer has no microscope, 3 or 4 specimens inclosed in a *quill* and sent by letter will suffice to determine if the species be one of those described here, or a new kind.

VI. *Icthyological Gleanings in Madras. By* T. C. JERDON, ESQ., *Surgeon, Madras Army. Communicated by* WALTER ELLIOT, ESQ., *Revenue Commissioner.*

During a residence of nearly two years in Madras I made a large collection of fish, and had rough drawings of them made by my Artist, but not having leisure to describe them fully at that time I regret to say, that a large portion of the collection has been since destroyed, and I am therefore unable to give a full Catalogue of all the species I procured. As however I identified at the time many of them, especially such as had then been described in Cuvier and Valencienne's great work on Fish, I think a brief notice of them may be interesting, pending the publication by some one who may have the opportunity of a more copious and elaborate Catalogue similar to that of Dr. Cantor on Malayan Fishes.

ORD : ACANTHOPTERYGII.

FAM. PERCIDŒ.

Lates Nobilis. Cuv. Kùdúva. Tam., Russell 131.

This fish the " cock up" of the Bengalees is common in the back-waters about Madras and abounds in the Fort Ditch. It grows to a large size and is very excellent eating.

Ambassis Cammersonii C. V. Selintan T. Abounds in the estuaries about Madras. Is too small to be of value as an article of food.

I possess a drawing of what appears to be another species of this genus with a very long anal fin and a black spot on each side of the tail ; it was about 3 inches long.

Apogon Nigripínnís. C. V. Length 3 inches, olive brown above —white beneath. D. V. & A., fins blackish. P. hyaline. C. dusky.

Besides this species, the only one I identified, I have drawings of three other species. One with a white line from above the orbit to behind 2nd dorsal, another from the opercule to middle of tail, with a darker line between the two—fins reddish—it appears allied, at all events, to A. *Quadrifasciatus.* The second is reddish above with the edge of the scales darker ; yellowish beneath with

a black spot at the root of the caudal, fins reddish, eye large. The third species is pale reddish above, whitish beneath, edge of caudal black. They are all of small size, 3 to 4 inches long, and none of them appear to have any distinct names given them. One of these was called by some 'Mela Kadil Selintan' or the deep sea Ambassis—to some the name of Kakan or Kakasi was given.

Cheilodipterus. A species apparently belonging to this genus was once brought me without a name—its colours were reddish with longitudinal brown lines, fins bright pink, edged with blackish. D. 6, 1—9. A. 2—8.

Diplopsion Bifasciatum. C. V. Anoovah min. T. This pretty fish is rare at Madras.

Serranus Lanceolatus. Panni-min T. Russ. 130. Grows to a large size,—very common.

Serranus Formosus. C.V. Called Narraina Kallawai or Nama Panni, or Neela Panni. R. 129. A very beautiful fish by no means rare. I have not seen it larger than 18 inches long.

Serranus Suillus. C. V. Poolli Karawa T. R. 127? Not very common, a very pretty fish. In one specimen, of which I possess a drawing, only the upper half of the caudal is spotted.

Serranus Lineatus. C. V. Seela panni T. Rare at Madras.

Serranus flavo-purpureus. Bennett. This very beautiful fish is very rare at Madras. I never saw but one specimen. I procured the very young at Sacrifice Rock on the Malabar Coast, it looked like a living sapphire.

Serranus nebulosus. C. V. I procured one specimen of this at Madras, and one at Tellicherry.

Serranus nooleni. C. V. Russ. 125? Nooleni T. I am inclined to think that Russell's figure is intended for this fish, and not for a species of Mesoprion to which Cuvier refers it, without however having seen a specimen. His account of the colours corresponds exactly with that of the Nooleni of Madras. It is a very beautiful fish, but one of very soft and flabby texture.

Serranus Sonnarati. C. O. Sin panni T. A very beautiful fish, the intensity of the red varies a good deal and it is sometimes marked with white spots. I think it possible that Russell's fig. 94 is meant for this species.

I possess a drawing of another Serranus of a reddish fawn colour, brownish on the back, with three longitudinal brown lines, one pair above the eye to end of spiny dorsal, the second pair a little beneath the first to the posterior, third of soft dorsal, and the third pair beneath the eye to the middle of the tail, second dorsal and caudal spotted. D. 11-12.

Diacope notata. C. V. Warri Na-kadisay T. Not uncommon at Madras, up to 18 inches.

Diacope Sebœ. C. V. Konden Korawa. T. Rare at Madras.

Diacope rivulata. C. V. Pinnel of some, Korili. T. Of others Russ. 96.

Russell's figure is undoubtedly intended for this fish, the colours are well enough described by him, often taken at Madras, grows to a large size.

Diacope marginata. C. V. Vekkeday. T. Russell 122? Common at Madras. I have not seen it of large size.

Diacope octolineata. C. V. Warri Na-kadisay. T. Russ. 110? Of soft texture, not rare.

I possess drawings of two other species of Diacope which I did not identify, but which are probably described by Cuvier. One is the Mooseri of Madras which grows to a large size and the other is known as the Mettemiri. I think perhaps that Russell's figure 100 of which C. V. make a Mesoprion, is the same as the Mooseri.

Mesoprion unimaculatus. C. V. Na-kadisay. T. Russ. 97. Common.

Mesoprion annularis. C.V. Kuttoo-purri. T. One of the commonest fish of the tribe at Madras, though not described by Russell, nor mentioned by C. V. as found at Pondicherry.

Mesoprion vangus. C. V. Singara or Senan karawa. T. Most excellent eating, often brought to table at Madras.

Mesoprion yapilli. C. V. Velle kadisay. T. Russell 95. Not very common, of soft texture.

Mesoprion gembra. C. V. Chango-munji karawa. T. Common in backwaters at Madras.

Therapon puta. C. V. Kove kichan. T. Russell 126.

Therapon servus. C. V. Palin kichang. T.

Therapon theraps. C. V. Kutta kichan. T.

Besides these three species of Therapon all of small size and no value, there is I believe a fourth which is known as Munja Kichan. T. This is very common on the Malabar Coast ascending rivers and backwaters and rises readily to the fly. D. 9, 1, 10. A. 3-8.

Priacanthus. I possess drawings of apparently two species of this genus. The one is entirely of a fine red colour and was named Pasuwa. T. The other is reddish above, white on the sides and the ventral fin, spotted with dusky. D. 10, 11. A. 3, 11; it was named Kewai. T. Myripristis botche. C. V. Moonda kun kakasi. T. Russell 105.

Holocentrum orientale. Sem pooram. T. This and the last are occasionally taken in the large nets at Madras.

Cirrhites fasciatus. C. V. I only once procured a single specimen of this curious fish at Madras. Its colours were reddish on the back and sides with lighter longitudinal lines. 2nd dorsal streaked with brown: caudal white spotted with red, and the first soft ray of the dorsal prolonged to a filament. The Natives had no name for it.

Sillago acuta, C. V. Kilingan or Kigingan. T. Russ. 113. This fish is known at Madras as the Whiting, and is deservedly reckoned one of the most delicate flavoured fish for the breakfast table.

I never saw a specimen of Sillago domina at Madras, and the fishermen to whom I showed the drawing said they did not know it. Pondicherry is only 80 miles from Madras and I doubt therefore if it was sent from thence; most probably it is more from the mouths of the Ganges.

Otolithus versicolor. C. V. Panna T. Russ. 109. Very common at Madras one foot long. Another species of Otolithus, perhaps O. biauritus, Cantor, is found on the Malabar Coast and highly prized for the isinglass it yields. It is named Sille Kora, Mal. Grows to a large size.

Otolithus ruber. C. V. Also yields good isinglass.

Corvina catalea. C. V. Kattalé. T. Russ. 115 and 116. Common, grows to a large size.

Corvina miles. C. V. Velle katalé. T. Russ. 117. Common, up to two feet long.

Corvina carutta. C. V. Carutta katalé, T. More abundant on the Malabar Coast than at Madras.

Corvina semiluctuosa. C. V. Kari poodi, Mal. I have only seen this species on the Malabar Coast.

Corvina sina. C. V. Sin katalé, T.

Corvina maculata. C. V. Varri katalé, T. Russ. 123.

Umbrina Russelli. C. V. Taru katalé, T. Russ. 118.

In addition to these species of Scicenidœ there are other species which I did not identify, viz. Tooroo katalé, T. and Pooroowa katalé, T. None of this tribe are much prized for the table.

Pristipoma caripa. C. V. Koori min, T. Russ. 124. As the markings of this fish somewhat resemble those of Corv. maculata the Native names are often interchanged.

Pristipoma paikeeli. C. V. Kulloo koraké, T. Russ. 121.

Pristipoma kaakan. C. V. Koraké, T.

Pristipoma guoraca. C. V. Tokaré, T. Sometimes called Wadi kechan, T. Russ. 132.

Pristipoma hasta. C. V.

Pristipoma dupumierii. C. V. Malabar Coast.

Scolopsides kati. C. V. Rama kadasi, T. also Kuloori, T.

Scolopsides kurita, C. V. Kara Kooti. T. Russ. 106.

Another species also occurs at Madras sometime called Kul kari, T., of a dull reddish colour, yellowish on the sides and the scales edged with darker, body higher than in the last two.

A fourth species is also found of which however I only saw one specimen. Its colours were inky black with the edge of the soft dorsal white, and the caudal pale yellowish white. It was called Taooto pinnel by the fishermen who brought it to me, and was about 5 inches long.

Lobotes crate, C. V. Kul worady, T. Not common at Madras.

Diagramma ————————. Wodedi, T. Grey above, whitish beneath, dorsal and caudal spotted, face and cheeks spotted with rusty—D. 9—25. A. 3-7—up to 18 inches long, not rare.

I possess drawings of three other species of varieties of this genus one of which appears to be D. pœciloptorum, a second D. blochii and a third D. balteatum—they were all named as Wari kichan, T.

Chrysophrys calamara, C. V. Karapor mattiwai, T. Russ. 92. Very common at Madras—most excellent eating, usually called black rock fish.

An allied species is found on the Malabar Coast, which appears to differ in having the D. fin 11-11, A. 3-11, and in the profile being more rounded.

Chrysophrys chrysargyra, C. V. Velle mattewai, T. Russ. 91. This is a very beautiful fish and is also excellent eating. It is not very common. Pinelepterus dassumierii. C. V. Pinelepterus lembus, C. V. Tendilli, T. Neither of these are common at Madras.

Pomacentrus ————————. D. 13-13. A. 2-13. Neela setta min, T. 3 inches long.

Cœsio erythrogaster. C. V. I once procured a specimen 18 inches long of this handsome fish which the fishermen called kul kilchi, T. but which did not appear well known to them, D. 11-14. A. 3-12.

Glyphisodon sordidus C. V. Russell 85.

Glyphisodon rahti C. V. Russell 86.

Both these are sometimes called Tendilli, T.

Amphiprion xanthurus, C. V. Tambra min, T. 3 inches long, rare.

Etroplus ————. A large species 9 inches long, was once brought me, brown with dark vertical bands. D. 19-13. A. 11-12, and was called by the fishermen Kullu selli kas, T. I procured an allied species about the same size at Tellicherry of a blueish tint with dark bands. D. 18-13. A. 12-10, and the profile of head higher.

Platax. Two or three species of this curious genus are not uncommon at Madras—one of these is certainly Pl. Raynaldi, C. V. called Vaval min, T. Russ. 87 and the others are Pl. teira, C.V. and Pl. vespetilio. C. V. both called by the same name which means bat fish.

Heniochus macrolepidotus. C. V. Sadakan, T. Pearl white with two ventral purple bands—P. 2nd D. and caudal yellow, ventral purple 7 to 8 inches long. A very beautiful and by no means rare fish.

Psettus shembens. C. V. Kooteri, a Kootoova Nachi, T. Russ. 59.

Chœtodon decussatus. C. V. Kunnadi, T.—now and then met with.

Chœtodon octofasciatus. C. V. Munja cooli min, T. Rarely met with.

Chœtodon pretextaus Cantor. I possess a dried specimen which appears to be this species. I had marked it as near omatissimus, or reticulatus.

I also have a drawing and the dried skin of another species of chœtodon which I procured at Tellicherry. It has the ground color of the body a sort of lavender colour, line from the 1st dorsal down to the muzzle yellow; chin, throat and lower part of face and a line from top of opercule to base of pectural, bright orange membrane between the dorsal species yellow, with a blue spot which continues on a line on the upper portion of the soft dorsal, and also on the anal soft dorsal green with a yellow margin; Anal and Ventral yellow; caudal lavender; the rays purple, and margined on the sides with yellow and exteriorly with orange; lips red. D. 14-26. A. 3-23. Length 6 inches.

Holocanthus insperator. C. V. Kulloo koli min, T. not unfrequently taken at Madras.

Holacanthus semicircularis. C. V. I only once procured this beautiful fish. I have drawings of two other Holacanthi, which I did not identifiy. They are called indifferently Pati min, T.

Scatophgus, argus, C. V. Sipili, T. Russ. 78. Very common in the rivers and backwaters.

Drepanus longimanus. C. V. Sipu tarate, T. Russ. 81.

Drepanus punctatus. C. V. Pooli tarate, T. Russ. 79.

Ephiphus orbis. C. V. Tarate T.

Pagrus longifilis. C. V. Russ. 101.

Pagrus spirifer. C. V. Both of these are named by the fishermen Ponandilli.

Dentex striatus C. V. Kandal min, T. Alternate longitudinal bands of rosy and yellow, face purple; dorsal purple beneath, yellow in the middle and rosy externally. Anal banded with pale rosy, others tinged with rosy. I have seen another species apparently of this genus which appears to resemble Russell's, fig. 107 referred by C. V. to Cautharus. It was named Peroom kandal min, T.

Pempheris mangula. C. V. Moonda kun karawa, T. Common at Madras.

Gerres filamentosus. C. V. Woodan T. Russ. 67.

Gerres punctatus. C. V. Tasa woodan, T. Russ. 68. Both very common in backwaters of Madras.

Lethrinus Karwa. C. V. Karwa, T. Russ. 89.

Lethrinus Korely. C. V. Korili T.

Lethrinus maculatus. C. V. Peroon Kilche, T.

Scarus harrid. C. V. Keeli min, T.

Tautoga fasciata. C. V. Pacha pora min, T. I only once procured a specimen of each of the last two species.

Julis lunaris. C. V. This very beautiful fish often caught.

Julis Dassumerii. C. V. Not uncommon in the Adyar river at Madras.

Julis Mola. C. V. Rare.

I possess a specimen and drawing of another very beautiful Julis which I have not identified—ground colour sea green with 3 yellow longitudinal bands, the middle one edged with vermilion and a black spot between the two first over the middle of the pectoral, face with some red marks. Dorsal fin vermilion beneath, with two rows of spots blue edged white, then yellow, then a line of blue, and edged with vermilion. Anal yellow edged both externally and internally with a blue and red line. Tail yellow with vertical bands of red. Length about 6 inches. D. 20 A. 13.

Moonjilli T. D. 12-10. A. 3-10.

Kul moonjilli D. 12-11. A. 3-12.

These fish are both very rare the first is red throughout with some yellow or dorsal and anal fins ; the other has a yellow body with some black spots posteriorly and the scales edged red, head, dorsal and anal fins fine red, caudal pale red with a black spot at the base. Pectoral and ventral yellowish.

I possess drawings of two other species of Julis ; both of small size, one is of a fine crimson or lake colour, with a golden stripe from the eye to the root of the tail ; the other is reddish above, white beneath with a streak of fine red from muzzle through the eye to the tail ; a row of red spots between it and the top of back : dorsal fin red, with a row of red spots at its base ; caudal whitish, barred with red : anal red. P. and V. white.

Xyricthys cyanifrons. C. V. Vella parala, T.

Scanber karagurta. C. V. kana keleti ; T. Russ. 136.

Indian Mackerel. Very rich eating, in greatest abundance on the Malabar Coast, where it is called Eila min, up to 10 inches long.

Thynnus affinis, Cantor choori min, T.

I procured a single specimen of this fish at Madras. It was said however to be frequently taken far out at sea.

Thynnus (orcynus)? ———D. 14-3 12-ix. A 12-ix. Steel blue above, white beneath, 2nd dorsal and finlets yellow. Pectoral fin long falerform teeth very minute. I procured a single specimen of this fish at Tellicherry. It is said to abound in the deep water near Sacrifice Rock and was called Inda min, Mal.

I procured another fish of this tribe which I cannot refer well to the genus. It has a short and low 1st dorsal of 6 or 7 rays then a long second one and one finlet, behind this and another opposite it behind the long anal fin. Pectoral fin short colour steel blue above and on the sides with green reflections, white beneath a yellow streak from the muzzle to end of tail. Dorsal and caudal fins dark. It was named Poon kolal, T. and was said to be well known. It was nearly 2 feet long.

Cybium commersonii, C. V. Mawilasi, T. Russ. 135.

Cybium guttatum. C. V. Vanjara T. Russ. 134.

Cybium interruptum. C. V. Velerhe min, T.

Cybium lanceolatum. C. V. Barim kootti, Mal. I have only seen this last one on the Malabar Coast, they are all known as Seer fish, and afford most excellent eating.

Chorinemus tol. C. V. Akam pare, T. Russ. 138.

Chorinemus cumersonii. C. V. Tele pare, T. Russ. 141.

Chorinemus St. Petri, C. V. Karamgola pare, T.

Chorinemus tala. C. V. Konan tele pare, T. Russ. 140.

Chorinemus toloo. C. V. Kadam bere pare, T. Russ. 137.

Most of these species of chorinemus grow to a large size 2 feet and upwards. They are not very highly esteemed being very dry.

Trachinotus mookalee. C. V. Kootili, T. Russ. 154.

Trachinotus Russelli. C. V. Kootili, T. Russ. 142.

I have, besides drawings of one or two small species which appear distinct.

Apolectus stromateus. C. V. Choori Selle, T. up to 4 inches.

Caraux Rottleri. C. V. Komara Pare, T. Russ. 143.

Caraux kurra, C. V. Moonda kua kilchi, T. Russ. 139.
Caraux malabaricus, C. V. Tollam pare, T. Russ. 150.
Caraux nigripes, C. V. Kanni pare, T. Russ. 152.
Caraux ciliaris, C. V. Chitteli pare, T. Russ. 151.
Caraux speciosus, C. V. Pilli pare, T. Russ. 149.
Caraux ekala, C. V. Sergada pare, T. Russ. 146.
Caraux sem, C. V. Sem pare, T. Russ. 148.
Caraux lessonii, C. V. Rapare, T. Russ. 144.
Caraux melampygus, C. V. Walum pare, T. Russ. 145.
Caraux jarra, C. V. Korandilli pare, T. Russ. 147.

Besides all these I have drawings of at least 12 more species of this genus, most of which have distinct native names, but I have not the means of verifying them just now. They abound at Madras but are comparatively rare on the Malabar Coast. Some of the larger sized ones are excellent eating, though never brought to our tables.

Olistus malabaricus C. V.

I possess a drawing of a fish which corresponds with the outline and colour of Russell's fig. 156, of which Swainson has made his *Argylepis Indica*, but in my drawing the two dorsals are distinct, not joined as in Russell's figure.

Lactarius delicatulus, C. V. Soodomboo, T. Russ. 108 : common at Madras.

Seriola cosmopolita. C. V. Tergaee pare, T.

Seriola———? Mooskoom pare, T. marked in a similar manner to S. binotata C. V. but has 1st dors. deep black and 2nd dors. edged with black : ventrals dusky : some irregular patches of dusky also on the sides. D. 6-1-32. A. 2-16.

Gallicthys wajor, C. V. Loote pare : T. Russ. 57, not uncommon.

Scyris indica. C. V. also called Loote pare, T. I once procured a specimen which I considered as an old individual of this species, 30 inches long : the long points of the dorsal and anal were wanting.

Kurtus cornutus, C. V. Kakasi, T. Russ. 48, common at Madras.

Stromateus atous, C.V. Mowe, T. Russ. 44, Pomfret, white Pomfret. This in by far the finest eating of all the species of the genus.

Stromateus candidus, C. V. Velle vaval, T. Russ. 42, White Pamfret often confounded with the last but not nearly so well flavoured and never grows to such a size.

Stromateus niger, C. V. Karapoo vaval, T. Russ. 43, Black Pamfret, not very common at Madras and not much prized there, but on the Malabar Coast very plentiful at times and most excellent eating.

Stromateus griseus, C. V. Velle selle, T. Russ. 45, not much prized at Madras.

Equala dussumierii, C. V. Varri kare..

Equala caballa, C. V. Soorookoo nam kare, T. Russ. 62.

Equala coma, C. V. Kotoo kare, T. Russ. 63.

Equala bindus, C. V. Tatnam kare, T. Russ. 64.

Equala splendens, C. V. Kulli kare, T. Russ. 61.

Equala daura, C. V. Rama kare, T. Russ. 65.

Equala insidiatrix, C. V.

Equala filigera, C. V.

Besides these there are several other species of Equala common which I did not identify.

Mene macutala, C.V. Amatti katti, T. i. e. Razor, Russ. 60, common at Madras.

Amphacanthus javus, C. V. Toorra, T. Russ. 102.

Amphacanthus Russelii, C. V. Worra, T. Russ. 103.

Amphacanthus ———— ? Illoopoo Worra, T. of a blueish tint throughout darkest above, with orange or justy longitudinal lines, a large spot of some colour towards the end of the soft dorsal and some small spot, on the tails fins blueish white 9 inches long not uncommon at Madras.

Amphacanthus———? Of a blueish tint with some rust coloured spots on the sides ; spiny dorsal and anal dusky black the first spotted ? soft dorsal, anal and caudal, hyaline with rose of black spots.

I have also a drawing of another and more elongated form of this genus to neither of these last two was any peculiar name given.

Ancanthuras triostegus, C. V. Rare at Madras.

Acanthurus rasi, C. V. Koli, T. Russ. 82.

I have no doubt that Russell's fish of which C. V. make a separate species is the same as that named above. It is not uncommon at Madras.

Acanthurus relifer, C. V. Grumbum, T. Rare. I have only seen a dried skin procured by W. Elliot, Esq.

Coryphœna ————. Parala, T. Dolphin.

This species has been described by Cuvier and Valenciennes who procured it at Pondicherry, but I have forgotten to mark the name on my drawing. It is a very beautiful fish and I have procured it several times. It is very excellent eating.

Histiophorus Indicus, C. V. Myl nim (i. e. Peacock Fish), T. I procured one or two specimens of this magnificent fish while at Madras, and sent a veryfine one to the British Museum—The figure and description by Cuvier give a very imperfect representation of the fish. The dorsal fin is much raised especially about the centre and is of the most beautiful bright prussian blue with dark spots: the colour of the body is steel blue, white beneath; other fins dusky black D.

In one fish the rays were as follow. D. 40-6. A 8-6. In another D. 37-6. A. 12-6.

Trichiurus naumela, C. V. Wale, T. Russ. 41.

Trichiurus savala, C. V. Sa-vale, T.

Both of these fish are exceedingly abundant at Madras, but more especially on the Malabar Coast. They afford very delicate eating when fresh, though never brought to the table of Europeans.

Elacate pondiceriana, C. V. Kadavara, T. Russ. 153, a large fish 4 feet long.

I have seen a drawing of another species in possession of W. Elliot, Esq. which is evidently E. Bivittata C. V.

A species of Echeneis is not uncommon at Madras and is sometimes called by the same name as the last,by others named Wottoode, T. or Oorowa kootti.

Xiphichthys Russelii Sw. Russ. 39. I one day procured two specimens of the very curious species of gymnotus which Swainson has named from Russell's figure, which however is very defective. Its tail ends in a long bilament, and the dorsal and anal fins are much higher than is there represented.

Cepola ————. I got one specimen only of a very pretty species of Pubben fish at Madras. It was red silvered and had two series of yellow spots on its sides.

Ammodytes ————. I have a drawing of a fish got at Madras which appears to belong to this genus. It is of a reddish colour streaked longitudinally with white, tail deeply forked, 37 rays in the dorsal and 14 in the anal fin.

Ophiduim ————. I also have a drawing of a species of this curious genus, of a yellowish brown colour united D. C. and A. fins reddish white, edged strongly with black.

Leptocephalus. I have drawings of 4 species of this curious genus, all procured at Madras and some of them not very uncommon. One of them is of a very lengthened form its height being more than 20 times in its length. In another the height is about 12 times in the other two the height is only about 8 times, but in the one the tail tapers gradually and in the other very suddenly and is prolonged to a point.

Histularia immaculata, Russ. Walan kola, T. Russ. 173, often brought by the fishermen of Madras.

Amphisyle scutata, Kleir, marri kola, T. a good many specimens of this fish were procured by me at Madras.

Sphyræna jello, C. V. Woola min, T. Russ. 174.

Sphyræna obtusata, C. V. Kul-oola min, T. The first of these is common, the latter less so.

Polynemus tetradactylus, C. V. Yerra kala, T. Russ. 183.

Polynemus plebeius, C. V. Pole kala, T.

Polynemus indicus, Shaw, Walan kala, T.

Polynemus sextarius, C. V. Kutli kala, T.

Polynemus septadactylus, C. V. Ma-kala, T.

The first 3 species are called 'Roeball' at Madras and are consisidered good eating.

Mugil cephalotus, C. V. Kola kende, T. Russ. 180.

Mugil corsula, Buch. Tergene kende, T.

Mugil cunnesius, C. V. Sada paranda, T. Russ. 181.

Mugil parsia, Buch. Pasi kende or paranda, T.

The Mullets abound in all the seas and backwaters and are much prized as food. At least three more species are distinguished by the Madras Fishermen.

Atherina forskalii, Russell? Cantor, Mottechi. T. sometimes Motti kola kende. Not uncommon at Madras.

Upeneus Russelii, C. V. Kul navere, T. Russ. 157. This very beautiful fish is rarely met with at Madras.

Upeneus vittatus, C. V. Navere, T. Russ. 158.

I have common drawings of two other species of this genus, one of them spotted all over with small red spots and dorsals and caudal barred with the same, called Pe navere, T. 4 inches long. The other is of a more elongated make, blueish on the back, whitish beneath, and called Marapoo navere. Neither of these are very rare.

Calloptilum mirum, Rich. ? I procured in 1844 one specimen of a fish of this remarkable genus, which I still possess, though I have not access to it at present. I doubt if it is identical in species with the one named above. The pectorals of mine appear shorter, as well as the ventrals, and the tail is rounded instead of being truncated. The fisherman who brought it called Vovirikende, T., thus signifying its relation to the Mugils.

Polyacanthus cupanus, C. V. Common in some of the backwaters, the spines of the dorsal fin inflict a severe burning pain which remains for some hours.

Dactylopterus orientalis, C. V. Ana toumbi, T. rare at Madras.

Pterois volitans, C. V. Sin toumbi, T. Russ. 133 : not uncommon.

Pterois muricata, C. V. I only met with this species on the Malabar Coast.

Apistes alatus, C. V. Belle toumbi, T. Russ. 159. B. common at Madras.

Apistes Belanjeri, C. V. Malabar Coast.

Pelor———— ? Karoom toumbi, T.

I have drawings and specimens of a very curious fish which I have marked as Apistes niger C. V. I however hardly think it can belong to this genus ; it appears to me rather an aberrant form of Pterois allied to Swainson's genus Brachyrus. Three free rays at the base of the Pectoral fin, head tuberculated, dorsal fin commencing just behind the eyes ; colours fleshy mottled and marbled with dusky and gray ; fins the same ; caudal black with central fleshy band, pectoral with a large bright orange spot on its inner surface, D. 12-10. A. 9. Length 4 inches, often procured.

Agriopus————. I possess a drawing of a small species of this genus of a mottled red colour throughout. I only procured it once, it was named Crasi toumbi, T.

Synarceia elongata, C. V. Kul toumbi, T. not very uncommon.

Uranoscopus marmoratus, C. V.

Uranoscopus guttatus, C. V.

Uranoscopus inermis, C. V. By some accident I have omitted the native name of these fish, which are by no means rare at Madras, especially the last.

Minous worra, C. V. Chegopoo toumbi, T. Russ. 160, common.

Scupæna venosa, C. V. Kul toumbi, T. Russ. 56, not rare at Madras.

Platycephalus insidiator, C. V. Ooda-pati, T. Russ. 46, very common in all the estuaries.

Platycephalus scaber, C. V. Vet-ooda-pati, T. Russ. 47, nearly as common as the last.

Platycephalus timoriensis, C. V. 6 inches long, of a yellowish red colour unspotted above, whitish below; spines and rays of the dorsal fins annulated with brown; pectoral and ventral fins deeply margined with black.

Platycephalus ————. With 4 or 5 large bands on the body, and 2 on the caudal fin; 1st dorsal edged with black and with some dusky spots, 2d dorsal with the rays annulated with black; pectoral and neutral fins, barred with black, called Pe-ooda-pati, T.

These last two are occasionally met with at Madras.

Callionymus lineolatus, C. V. Killi min, T. Reddish above, blueish white beneath, mottled and marbled with brown: dorsal fins brownish with white translucent spots; anal fin red with small blue spots; pectoral yellowish white, dotted with red; neutral brown with white and blue spots; 1st dorsal not quite twice the height of the body, D. 4—9, A. 8.

Callionymus ————. 1st dorsal fin nearly three times the height of the body, body marked with brown, yellowish white and blue, dorsals and caudal isabella colour, with translucent marks on the 1st dorsal and a black white-edged spot between the 2d and 3d dorsal spines at this base, 2d dorsal notched with brown and faint blue marks, caudals with 2 vertical rows of dark anal spots; anal dark brown with blue spots; pectoral spotted red, and neutrals brown with whitish spots, also called Killi min, T. up to 6 inches long, much more uncommon than the last.

Callionymus sagitta, C. V. Mottled pale isabella and white, with a row of small spots on the sides; 1st dorsal with the 2d and 3d rays much prolonged, and the membrane twice the height of the body; 2d dorsal edged with dark lines; anal with a broad black marginal band; caudal spotted brown; length about $3\frac{1}{2}$ inches, D. 4—9. A. 9.

Callionymus————. 1st dorsal low, of three rays; colours of body much as in the last; dorsal and anal without the marginal edging; caudal with a marginal row of brown triangular spots, D. 3—10, A. 10, 4 inches long. Both this and the last species were not unfrequently brought me at Madras, they were usually called Manil ooda-pati, T.

Gobius viridipunctatus, C. V. Bichu gende, T.

Gobius catebus, C. V.

Gobius setosus, C. V.

Gobius ————. Reddish fawn, with brown blotches and orange spots; 1st dorsal with a row of red spots at the base and a dark edge; 2d dorsal the same, with a central band also; caudal banded vertically; anal with two orange bars, and brown edging; pectoral streaked with dusky; ventrals black, D. 6-14, A. 13, length 6 inches. There are several other species of gobius chiefly of small size as well in the estuaries as in the sea—some of these are called Ooloove, T., other Natsooli, T., other richer Gendi; but they do not appear to have distinct names.

Eleotris sex-guttata, C. V.

Eleotris ————. Of a reddish fawn colour, lighter beneath; a row of small red spots on the back, followed by another series of larger oval red spots, and this by a band of red edged with lilac on the sides; several red spots on the head and cheeks, two on the 1st dorsal and five on the 2d dorsal fins whitish. D. 8-12, A. 12—6 inches long.

I found a specimen of this very handsomely marked fish in the throat and gullet of a large sea eel, Muræna. The fishermen had never seen it before.

Apocryptes dentatus, C. V. Wal vette, T.

Apocryptes lanceolatus, C. V. Pai vette, T.

Apocryptes victuosus, C. V. Vetti, T.

Amblyopus Hermannianus, C. V. Kondre min, T.

Amblyopus cæculus, C. V. also Kondre min, T.

Trypauchen vagina, C. V. Sevetti, T.

Periopthalmus ————. Greenish marbled with 1st dorsal spotted, 2d with a dark bar in the middle, all fins fleshy colour; abounds in all the estuaries of Malabar, remaining for long on the mud, or climbing up the side of a boat, or stone, or mangrove bush, when driven to the water does not dive at once but jumps along the surface and tries to get to shore again.

Boleophthalmus doddaerti, C. V. Vetti, T. Russ. 54. Two or three other species of Boleophthalmus are found at Madras.

Opistognathus Sonneratii, C. V.? found at Madras.

Rupiscartes————. One of Swainson's subgenus occurs at Madras.

Blennius————. I found a species of Blenny at the Sacrifice Rock on the Malabar Coast.

Cirrhirrhibarbus————. I have drawings of three species of this ourious genus, all procured at Madras, but rare; one of them is of an uniform brown colour, with the edge of the united dorsal, caudal and anal fins red. Another has the dorsal fin with three large round black spots and a brown edging to the united fins; and the third has a black edging likewise round the fins. In the first the rays are $\frac{\text{D. } 126.}{\text{A. } 95.}$

Salarias dussumierii, C. V. Common in pools among rocks left by the receding tide on the Malabar Coast.

Batrachus ————. I procured one small specimen of about 3 inches long at Madras of a species of this genus, yellowish brown, mottled and marbled with black. The fishermen did not know it.

Batrachus Dussumierii, C. V. Common at certain seasons on the Malabar Coast.

Chanos pala, C. V. Moram kende, T. Russ. 207.

In my memoir on the fresh water fishes I mentioned this as a species of Butirinus (Albula,) but I find that it belongs to this genus as was pointed out by Dr. Cantor.

Chanos. Poo min, Can. This fish which is occasionally found in the sea and estuaries on the Malabar Coast is also mentioned by me as Butirinus indicus.

I believe there is another species at Madras known at Madras as the Sewa-oolum, T., but it appears to have a longer anal fin than the others of the genus ; I take it to belong to this genus, from the scaly laminæ on the tail and at the base of the pectoral and ventral fins. It may however be an Alansa.

Albula macrocephala, C. V.?? I have neither present access to my specimen, nor to the description in C. and V. so merely give this name at a venture as it applies well to my species, which has 78 scales on the length in 15 rows, D. 17, A. 7. I procured it on the Malabar Coast.

Dussumieria acuta, C. V. Parawa moda kende, T.

There are 2 or 3 more species, apparently belonging to this genus common at Madras, called Koolum moda kende, T., and Panna moda kende, T.—All the Herring tribe are much more abundant on the Malabar Coast than at Madras.

Kowala thoracata, C. V. An kawile, T. Russ. 186, enters estuaries and rivers.

Three other species are called by the same generic name by the Tamools, two of which at least may belong to this genus—their names are Varri kawile, T., Koola kawile, T. and Newula kawile, T.

Engranlis albus, C. V. Netteli, T., also Teran Goonee, T. Russ. 187. This little fish is caught in great numbers and highly esteemed for the breakfast table.

Two other closely allied species are distinguished by the fishermen at Madras, one of which is which Pota-netteli, T., and the other Maper netteli, T.

Engranlis———D. 15, A. 18, height greater than in the last species. 6 inches long, a very pretty species and delicate eating.

Thrypa purava, C. V. Tadi poorawa, T. Russ. 190.

Thrypa subspinosa, Sw. Sem poorawa, T. Russ. 189.

Thrypa————Wani impoorawa, T. Russ. 194.

Alansa palasah, C. D. Oolam min, T. Russ. 198.

Table fish, ascends rivers and the roe is highly prized, 18 inches long and upwards.

Alansa————? Nonale, T. Russ. 195, up to 1 foot long.

Pellona indica, (Sw.) Kootoowa, T. Russ. 192.

Pellona megaloptera, (Sw.) Koa-kootoowa, T. Russ. 191.

Pellona——————? Tera kootoowa, T. Russ. 188.

Pellona——————? Kooroovoo venge, T.

Pellona affinis (Sw.) Poovale, T.

Pristegaster indicus, Swains. Taleri, T. Russ. 193.

Raconda Rupelliana, Gray. Nataleri, T. Very common at Madras, and always distinguished by the fishermen from the preceding one.

Chatoessus chacunda? Pacha koottee mada kende, T.

Chatoessus altus, Gray? Pola mada kende, T. Russ. 197.

Chatoessus——————? Another species without the dorsal filament, a black spot behind the opercule.

Elops saurus, L. Ullate, T. Russ. 179.

Negalops amdinga, (Buch) Moram kende, T Russ. 203.

Chirocentrus dorab, C. V. Karroovalle, T. Russ. 199.

Coilia——————? Toge, T. Very common at Madras, in the sea and estuaries.

Bagrus chinta, C. V. Kadil vaitum Kelti, T. Russ. 167.

Bagrus bilineatus, C. V. Tope kelti, T. Russ. 169.

Bagrus netuma, C. V. Netuma kelti. T.

Bagrus——————? 8 cirri D. 1, 5, A. 25. Max. cirri short—yellow throughout ; caudal and anal fins broadly edged with reddish ; a black spot behind the operculum. 1 foot long, Malabar Coast.

Bagrus——————? 6 cirri D. 1, 7, A. 14.

Arius militaris, C. V. Pone kelti, T. Very abundant on the Malabar Coast. The air vessel yields a course isinglass, and is exported to Bombay.

Arius arius, C. V. Karoom kelti, T.

Arius rostratus, C. V.

Arius subrostratus, C. V. Met with at particular seasons only on the Malabar Coast.

Plotosus lineatus, C. V. A-kalda, or A-kelti, T. Russ. 166. Common at Madras, of small size.

Saurus badi, C. V. Toombeli, T. Russ. 172. Very common up to 10 inches.

Saurus myops C. V. Narraina tombeli, T. Outline similar to the last. Of a yellowish red colour, on the back a blueish silvery line

scolloped at the edges and fringed with black commences at the nape and ends with the 1st dorsal fin, a second line from operculum running obliquely to part of 2d dorsal and thence along the ridge to the caudal, and a third from base of the pectoral to the middle of the tail; beneath this some black marks spots and lines; 1st dorsal blueish white with two faint yellow bands; anal edged with yellow; caudal reddish yellow; pectoral and neutrals yellow, D. 12 A. 15.

Saurus————? Above variegated and spotted with yellow and red, beneath white with a tinge of yellow; profile of head depressed, mouth more horizontal than in last two species; dorsal and caudal fins spotted with reddish. D. 12, A. 12.

Saurus ophiodon, C. V. Wangara was, T. Russ. 171. Bummelo on the Malabar Coast. This is the celebrated Bombay duck and though highly prized in a fresh state there, it is despised at Madras even by the fishermen. It is however not very common at the latter place, but I recommend epicures to test its qualities for the table.

Belone annulata, C. V. Kariwalan kola, T. Russ. 175, up to 18 inches and more.

Belone caudimacula, C. V. Paman kola, T. Russ. 176.

Belone————? D. 19, A. 20.

Hemiramphus Russellii, C. V. Chappa kola, T. Russ. 177.

Hemiramphus Georgii, C. V. Warri kola, T.

Hemiramphus ————? Kola, T. Russ. 178.

Exocetus ————. D. 14, A. 11, nearly one foot long, rarely met with at Madras.

Exocetus nigripinnis, C. V. 4 inches long, D. 11, A. 2. At times considerable numbers taken out at sea by the deep sea boats. Both these species of flying fish are called Parawa kola, T.

Hippoglopus erumei (Bloch,) Nai-erulu, T. Russ. 69.

Hippoglopus erumei, var. A. Cantor, a reversed sinistral variety.

Hippoglopus erumei, var. B. Cantor, Russ. 77.

Hippoglopus ————? A sinistral species without bands.

Rhombus maculosus, Cuv. Patang, T. Russ. 75.

Rhombus triocellatus, Cuv. Patné Sootong, T. Russ. 76.

Solea ————? Selli patté, T. Brownish olive, with black spots and blotches. Not common.

Synaptura Commersoni, Cuv. Eerumi nāk, T. Russ. 70.

Synaptura jerreus, Cuv. Varri amler, T. Russ. 71, 8 inches.

Synaptura ———— ? Atoo nak, T. brownish green, fins reddish, 4 inches long, estuaries.

Achirus ?———— ? I am doubtful if this be an Achirus or Plagusia. My drawing represents the fins as united, but this may be an error, as the colouring approximates it to the Achiri, of a pale greenish grey colour, 4 large spots along the dorsal margin of the body and as many on the anal scale; each formed of a double black ring; a small one near the eyes, and another near the base of the caudal. It is not common and was called Poolli nak, T.

Plagusia potous, Cuv. Kot-aralu, T. Russ. 73.

Plagusia bilineata, Cuv. Aralu, T.

Plagusia lingua, (Buch : Ham :) also called Aralu, T.

Chiloscyllium plagiosum, (Bennet), Korinjin Sorra, T., up to 3 feet and more. Russell, 16.

Stigostoma fasciatum, (Bloch.) Russ. 18. Komrasi-Sorra, T. young sometimes called Boroo-kootti, T. Not uncommon at Madras.

Scyllium ———— ? Pe Sorra, T.

Scyllium maculatum ?

Corcharias———— ? Sem Sorra, T.

———————— ? Meni Sorra, T.

———————— ? Parawa Sorra, T.

———————— ? Alawa Sorra, T.

———————— ? Noollian Sorra, T. I regret that I have no data for determining any of these sharks which are apparently all distinct, and there are, besides, others.

Sphyrna zygæra, Koman Sorra, T. Russ. 12. Human headed Shark.

Sphyrna blochii, bal. Wale koman Sorra, T. Abounds on the West Coast, rare at Madras.

Pristis semi-sagittatus, Shaw, Vela min, T. Saw fish. Russ. 13.

Rhina ancylostoma, (Bloch,) Man ulavi, T.

Rhynchobatus ———— ? Padargan, T. Russ. 11.

Rhynchobatus djeddensis, (Forsk.) Ulavi, T. Russ. 10.

Platyrhina sinensis ? Parra, T. Rare at Madras.

Narcine indica, Henle ? Timili, T. Russ. 1.

Astrape dipterygia, Bl. also called Timili, T.

Trygon narnak, (Forsk,) Mookun Tirike, T.

There are at least three other large species of Trygon which I cannot determine now as well from want of specimens, as of books of reference. One of them has a long fin on the posterior half of the tail.

Trygon imbricata, Bloch, Sembradaka, T. Russ. 4.

Hypolophus sephen, Forsk. Chemman tirike, T. Russ. 3.

Pteroplatea micrura, Bl. Tappor kooti tirike, T. Russ. 6.

Myliobatis Nienhowii, Bl. Courivi tirike, T. Russ. 7.

Stoasoden narinari, Bl. Same name as last.

Rhinoptera adspersa, Val.

Dicerobatis eregoodoo, Cuv. Koman tirike, T. Russ. 9. There is one other species of this genus at Madras.

Chironectes hispidus, Bl. Kadil madoo, T. Russ. 19. Very common at Madras.

Chironectes marmoratus, C. V. I only got one specimen of this at Tellicherry.

Chironectes———— ? Of a full brick red colour, covered with small spots ; filament very long, thin, 4 inches long.

Balistes jellaka Cuv. Pacha korawa, T. Russ. 22.

Balistes———— ? Varni korawa, T. Greenish with red longitudinal stripes ; caudal red and yellow.

Balistes———— ? Kulloo korake, T. of an inky black colour.

Balistes———— ? Wuttoe korake, T. Chesnut brown colour throughout.

Monacanthus———— ? Kadil appé, T.

Alutarius Berardi, Rich ?

Alutarius lœvis (Bloch). These last three species are not common at Madras.

Alutarius———— ? Allied to A. barbatus Gray. Appears to differ in the filament or head being nearly the length of the beard, the caudal fin spotted, &c. &c. It is not uncommon at Madras and is called Crassi kola, a Watamoo kola, T. Length 10 inches.

Triacanthus biaculeatus, Bl. Moolean, T. Russ. 21.

Triacanthus strigilifer, Cantor. Rama moolean, T. Not uncommon at Madras.

Ostracior cornutum, L. Palasi, T. Not common.

Ostracior turritum, Forsk. Kul palasi, T. Very common at Madras.

Diodon Nystrix ? Reddish white with black spots all over the body and fins. I only once saw a fresh specimen of this fish at Madras. Spined throughout.

Tetrodon immaculatus, Lac. Toppi palase. T. Russ. 26.

Tetrodon commersonii, Cuv. Moolum palasi, T.

Tetrodon—————— ? Varni palasi, T. Brown above with black spots; bright yellow beneath with vertical black stripes.

Tetrodon—————— ? Above black with white spots, beneath horizontal bands of black and white which become vertical on head and face, fins yellow, D. 10, A. 10.

Tetrodon bondarus, Cuv. Russ. 27.

Tetrodon———— ? Streaks of blue on head and back, and end of caudal, spots over the rest of the body except on the abdomen; dorsal fin rises from a black blue edged spot; reddish brown above, yellowish beneath; 4 inches long.

Karoom palasi, T. Not common at Madras.

———— ? Russ. 24. With no spines on the sides.

Tetrodon lunaris, Cuv. Koori min palasi, T.

Tetrodon dissutidens, Cantor. Carapoo palasi, T. Russ. 25.

Tetrodon ———— ? Velere min palasi, T. Reddish with white spots.

Tetrodon ———— ? Jem palasi, T. Spines on all the body as far as a curved line from beginning of dorsal to the abdomen. Common at Madras.

Tetrodon ———— ? Spines only on abdomen; green above, yellowish on the sides, abdomen white—D. 12, A. 11.—Malabar Coast.

I possess drawings of two very prettily variegated green and yellow Tetrodons, but without any notes of the situations of the spines, &c. They were called Pacha palasi, T.

Halicentœa stillata, C. V. I only procured two specimens of this curious fish whilst at Madras.

Pegasus draco, L. ? W. Elliot, Esq. procured specimens of this fish from the Paumbum Channel.

Sygrathas ———? Kadil koodray, T. Russ. 30. Not rare at Madras.

Hippocampus ———? Of a fawn colour with brown and orange dots—rare at Madras.

Conger talabon, Cuv. Koolivi pambu, T.Russ. 38. Very common.

Ophisurus ———? Settu poochi, T.

Ophisurus ———? Villi poon kolal, T.

Ophisurus ———? Nella kolinjin pambu, T.

Dalophis orientalis, McLell : Illi pambu, T. Russ. 37.—Very common at Madras. The boys catch it just at the edge of the surf by bruising a crab (Ocypode) in their hands and throwing it into the surf, then walking about over the spot and when they feel the eel about their feet, stoop down and suddenly dash it on to the sand with both hands. If thrown on to the moist sand they burrow themselves, *tail foremost,* almost instantaneously.

Dalophis ———? Mannoo poochi, T. Much more elongated than the last, 2 feet long.

Muræna ———? Thynoida, Rich. Pinnel pambu, T.

Muræna ———? Korili pambu, T. Common.

Muræna polyzona ? I got one specimen at Madras which appears to be this species, about 10 inches long.

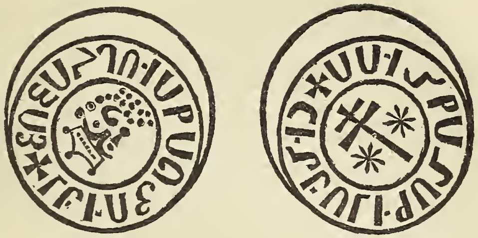
Muræna ———? Seran pambu, T. Of a deep maroon colour, and lengthened form, grows to a very great size, 10 feet and upwards, and is very voracious.

VII. *Description of a Copper Coin of Leo, King of Armenia.* By Mr. Samuel Marcar.

The science of Numismatics is one of the most interesting subjects of inquiry. The researches of European Scholars in this department within the last two centuries, have produced results of immense importance to the illustration of archæology; for, by means of the decided evidence which coins afford, considerable light has been shed upon many obscure points of history and chronology.

In some of the works lately published on the Numismatics of ancient states, we meet with descriptions of several coins belonging to the Armenian nation. It is much to be regretted that we do not possess the medals of the early Kings of that people: the coins that have been preserved to us are few in number, mostly silver; and they appertain to the Arsacidœ sovereigns—who ruled in Armenia from about B. C. 150 to the fifth century of the Christian era. The legends on these pieces are in Greek, bearing the names of Arsames, Tigranes, Artases, Artavasdes and other Kings of that dynasty: these have been ably described by the learned Visconti in the second volume of his "*Iconographie Grecque;*" but he is mistaken in supposing that they comprehend all the coins that are extant belonging to the Armenian monarchs. Among the pieces with Armenian inscriptions, those struck by the Reubenian princes, who governed in Cilicia from the eleventh to the fourteenth century, deserve particular notice, especially on account of their rarity. The celebrated Italian Numismatist, Domenico Sestini, has described some of them with great accuracy; and a work professedly on Armenian Numismatics has been composed by M. Brosset entitled "*Monographie des Monnaies Armeniennes.*" Two dissertations on the Reubenian coins have, I perceive, recently appeared on the continent: one the production of Professor A. Krafft, originally inserted in the Annals of Vienna, but subsequently printed in a separate form under the title of "*Armenische Munzen der Rupenischen Dynastie in Ciliciæn,*" Vienna, 1843: the other, in French, entitled "*Essai sur les monnaies des Rois Armeniens de la dynastie de Roupêne,*" by M. Victor Langlois, printed at Paris in 1850, from the *Revue Archéologique.* I regret that I had not the advantage of consulting the above Treatises in preparing this paper.

The coin that I purpose to describe belongs to the Reubenian series. It is a copper piece, and contains the legends in Armenian characters. The inscription on the obverse is *Levon thagavor Haiots* "Leon, (Leo) King of the Armenians," and in the centre is the representation of a lion's head crowned, in allusion to his name; the words on the reverse are *Sheneal i kaghakn i Sis* "made (struck) in the city of Sis," with the emblems of a double cross and



of two stars on either flank: the sign of a cross marks the commencement of the legend on both sides. The weight of the coin is little more than 90 grains Troy, and though displaying no great artistic perfection, it is not altogether devoid of some skilfulness. From the absence of date, and from the circumstance of there having been six kings of the name of Leo, it would appear somewhat difficult to fix the age of the coin. By attending however to the subjoined particulars concerning the life of Leo II., we might safely refer its execution in his reign.

On the abdication of his brother Reuben II., Leo, the second of that name, succeeded to the government of the Armenian kingdom of Celicia in the year 1185. This prince was remarkable for his wisdom and piety; and he greatly contributed to the happiness of his subjects by the salutary laws he enacted for their guidance. By his valorous and courageous conduct he extended his dominions beyond Mount Taurus, and made the city of Tarsus his place of residence, sometimes exchanging it for the city of Sis, which he improved and beautified. He took many towns and fortresses from the Saracens; and by his daring exploits gained the respect and admiration of the neighbouring princes: an instance of his strategic skill in capturing Bohemond, Prince of Antioch, is related by Marinus Sanutus, *(Secreta Fidelium Crucis lib. III. pars. X, c. VIII.)* Observing the prosperity which his government enjoyed, Leo began to wish for a public coronation, and the events of the time proved favorable to his desire. The emperor of Germany, Frederic I., to whom Leo had been of considerable assistance during the third Crusade, promised the Armenian prince to restore in his person the ancient kingdom of Armenia. The untimely and unfortunate end of Barbarossa, however, prevented him from executing his promise; but Leo was not to be discouraged: he despatched ambassadors to Pope Celestinus III., and to Henry VI., the son and successor of Frederic, regarding the affair, and request-

ed them to carry out his object. Both the Pontiff and the Emperor agreed to the proposition; and the ambassadors returned to Cilicia in the company of Conrad, Archbishop of Mentz, whom Celestinus and Henry sent with a magnificent crown for the purpose of gratifying Leo. At the same time the Emperor forwarded a splendid standard, having in the middle the device of a lion, in reference to his name. On the arrival of the deputies the ceremony of coronation took place in the city of Tarsus, on the 6th of January 1198, in the presence of a vast assembly of the nobles, clergy, laity and all ranks of people; and an excellent oration was pronounced on the occasion by Nerses Lambronensis, Archbishop of that place: this memorable transaction is related at length in the great History of Armenia by Father Chamchean, vol. III. pp. 164, 170; and also in the "*Conciliatio Ecclesia Armenæ cum Romanâ*" by Clemens Galanus. tom. I., p. 346, seq., who has produced several Epistles from the *Regesta* of Innocent III. having reference to this affair. Besides the above marks of distinction, the Emperor of Constantinople, Alexius Angelus, sent also a crown to Leo, and thus this Armenian prince of Cilicia is, as Professor Neumann observes, the only king who received the crown by both the Emperors of the west and the east, and by the consent of the Pope. These royal favors were conferred upon Leo in order to preserve a friendly relation with him; for the Latins and the Greeks thought him to be a very useful ally against the overpowering Saladin. Be this as it may, after the above event, Leo took the title of *Thagavor* or King, as did also all his successors; for the former rulers were only styled *Barons* of Celicia: he was likewise called "the Great" on account of his courageous actions. Leo died in 1219, having reigned in all 34 years, 12 as baron and 22 as king. His remains were interred in Sis, and a magnificent church built on the spot. From the above facts, it will appear evident that the coin must have been struck in the reign of Leo II., and the occurrence, at the same time, of the lion's head, the title of King and the double cross decides the question, I think, at once in favor of that sovereign. Under these circumstances, the date of the coin might be placed between 1200 and 1215, or very nearly 650 years ago.

With regard to Sis it is to be observed that it was once a famous

city of Cilicia, which according to Armenian Geographers, formed the fifth province of Armenia Minor. The Syriac and Arabic writers call it by the same name. (Gregory Bar. Hebræus, *Chron: Syr: p.* 195; Abulfeda, *Tabula Syriæ, p.* 138; Assemanus, *Bibl: Orient: tom. II, Dissert: de Monophysites.)* It is situated in a plain about 24 miles north from Anazarba, on the bank of a small river which unites with the Jihon. Although Sis was a place of some note as far back as the 10th century its citadel being mentioned by Theophans it was the above-mentioned Leo, who encreased its importance in 1186 by erecting several edifices and churches, and by making it his residence on certain occasions; which circumstance is testified by the Arabic writer Ibn Said, as quoted by Abulfeda, *loco citato.* From 1220 it was the capital of the kingdom until its destruction in 1374; in the interim however it was besieged and taken by the Egyptians, but restored in 1266. On the capture of Roum-Kalah by the Sultan of Egypt, Sis was made the see of the Armenian Catholicus up to the year 1441, when it was transferred to Etchmiatsin, the present seat: it is however the residence of a Patriarch. In 1307 a celebrated Council was held here owing to some doctrinal differences. Sis was also the place to which the remnants of the Crusaders took refuge on the destruction of the Latin kingdom of Palestine. The city is now included in the Turkish division forming the Pashalik of Adanah: it is chiefly in ruins, having lost all its pristine greatness and splendour, of which a minute account is given by an eye-witness Willibrand ab Oldenburg, a German traveller of the thirteenth century.

VIII. *On the Powers of the Aneroid, and its working compared with the Mountain Barometer;*—By Lieut. General Cullen.—*Communicated by the Author.*

Having run over to Coimbatore on some Public business, I thought I might as well push on to the Neilgherries to test the Powers of the Aneroid. I have had two of these Instruments from the last two or three recently made by Watkins and Hill of Charing Cross and purchased for me by Capt. Worster of the Artillery at Madras. They had verniers and read off to hundreths of an inch. I

had already tried them on the mountain near Trivandrum as high as 6000 feet and the indications appeared quite correct. One I left permanently on the mountains at a small Observatory I maintain there. The other has long accompanied me on all my journies. Dr. Wight, with whom I was staying at Coimbatore, had two Aneroids by the same makers but both were out of order and had not been tried at great altitudes, an additional incentive to my excursion, and on which he accompanied me. I went up to Kotagherry by the direct road, was there for 3 or 4 days and made a forenoon visit to Doda Bett, but it was a rainy, windy, day, with driving cloud mist which rendered the trip a most uncomfortable one. The results were however most satisfactory as regarded the Aneroid which fell on the top of Doda Bett to.................... 22·455 — 55°

at Matipolliam { ....Aneroid. 29·040
{ ....Barometer. 28·830

the Barometer being................Barometer. 22·120 — 55°

I have not seen any observations with the Aneroid at a greater altitude than 3000 or 4000 feet.

The same Aneroid, at the level of the sea, stood at about 30·120 so that, had Doda been a couple of hundred feet higher, the Index would have passed the limits of the scale. The Aneroid is a delicate Instrument and the scale not subdivided sufficiently, but I have much greater confidence in it now, and its extreme portability is an immense object to the traveller. I have been using it constantly of late for rough levelling while travelling in my palkee merely stopping the bearers for a moment to make the observation.

Two French Aneroids procured expressly for me by Froughton from the Patentee at Paris, do not appear to answer at all, being inaccurate, at even moderate elevations, and I have discontinued using them.

I enclose a Memo. of some of the observations of the Aneroid and Barometer at the above trip.

Observations with an Aneroid and the ordinary Mountain Barometer (NEWMAN'S.)

1852			Dew Pt. by Daniell.	Bulb Dry.	Wet.	Dew Pt.	
Aug. 2.	Barometer. 28·556 Aneroid... 28·765	80½°	—65°	—82	—71	=65½°	—Coimbatore.
„ 3.	Barometer. 28·537 Aneroid... 28·757	83°	—64°	—83	—70¾	=65°	—Goodaloor.
„ 4.	Barometer. 28·890 Aneroid... 29·097	83°	—66½°	—83	—72	=66½°	—Matipolliam
„ 6.	Barometer. 23·845 Aneroid.... 23·985	62½	—58½	—64	—61	=59°	—Kotargherry
„ 7.	Barometer. 23·872 Aneroid.... 24·020	65	—59	—64	—61	=59°	— do.
„ 8.	Barometer. 22·120 Aneroid.... 22·455	55	— ×	—53	—52½	=52°	—Doda Bett.
„ 10.	Barometer. 23·941 Aneroid.... 24·040	63	—55	—63½	—59½	=56°	—Kotargherry
„ 13.	Barometer. 28·655 Aneroid.... 28·795	82	—64	—83	—71½	=65°	—Coimbatore.

Col. Sykes appears to consider Glaisker's and other Tables, for deducing the Dew Pt. from the difference of the dry and wet bulbs, as very imperfect. The above results do not show error, nor have I found any very material error in any other observations which I possess except, perhaps, in very extreme cases.

IX. *Abstract of Meteorological Observations made at the Madras Magnetic Observatory, from July* 1849, *to June* 1852.

	Mean Monthly indication of the Barometer at the times of Superior Maximum and Minimum pressure corrected to 32°.0 Faht.			Mean Monthly temperature as deduced from the hourly observations, together with the Mean Monthly Maximum and Minimum Temperature.			Depth to which Rain has fallen, and amount of water evaporated from a shallow cistern of water, together with the relative humidity of the Air.			Direction of the wind in each Month, as exhibited by the number of hours during which it has blown from the N.W., S.W., S.E., or N.E.				Mean and extreme pressure of the wind as shown on a square foot of Surface.		Mean per Centage of clouds covering the face of the sky during the day and night in each month.		Mean Monthly Tension of vapour, calculated by the Monthly Means of dry and wet Thermometers at 30 In.
	1			2			3			4				5		6		7
	Maximum. P. M. h. m. 21·41	Minimum. P. M. h. m. 3·41	Difference.	Mean.	Maximum.	Minimum.	Rain.	Evaporation.	Quantity of Moisture or Humidity.	N.W.	S.W.	S.E.	N.E.	Mean.	Extreme.	Day.	Night.	Barometer Standard.
	Inches	Inches	Inches	°	°	°	Inches	Inches	Cents.	No.	No.	No.	No.	lbs.	lbs.	Cents.	Cents.	Inches.
1849																		
July........	29·756	29·644	0·112	86·4	95·6	79·5	3·580	10·053	·67	108	446	167	21	0·27	4·7	·78	·80	·822
August	·794	·670	·124	86·3	94·8	79·2	4·886	9·950	·69	97	383	245	14	·29	7·6	·74	·70	·839
September ..	·805	·672	·133	86·3	95·1	79·3	1·648	10·190	·65	218	348	133	21	·43	7·4	·83	·77	·787
October.....	·897	·777	·120	83·1	90·1	77·2	9·191	7·555	·76	174	201	185	178	·12	4·0	·64	·49	·842
November ..	·977	·873	·104	80·8	86·2	75·7	6·141	6 948	·75	192	6	61	452	·28	5·0	·62	·51	·774
December...	·996	·892	·104	77·7	83·2	72·4	6 806	7·240	·73	193	37	31	483	·29	7·0	·65	·54	·683
1850																		
January	·977	·858	·119	77·2	83·5	70·8	0·043	8·178	·72	116	15	39	574	·14	2·4	·55	·37	·663
February....	30·049	·924	·125	78·0	84·1	71·5	4·270	7·526	·73	76	44	227	319	·14	2·2	·42	·33	·686
March.......	29·997	·870	·127	80·8	89·9	71·7	0	10 351	·68	60	181	439	52	·12	2·6	·20	·17	·699
April.......	·899	·771	·112	86·0	93·9	78·2	0·980	10·808	·69	43	182	449	46	·20	2·0	·44	·36	·834
May........	·807	·685	·122	88·3	90·2	80·7	2·939	11·752	·68	34	289	403	18	·30	17·5	·45	·37	·879
June	·730	·605	·125	88·9	100·0	82·4	2·920	14·397	·60	378	276	46	17	·48	6·0	·79	·82	·794
July........	·754	·637	·117	88·0	97·9	81·1	1·527	12·715	·63	277	342	92	33	·32	5·5	·81	·85	·804
August......	·811	·695	·116	86·5	94·7	79·6	3·058	10·342	·70	190	396	136	22	·15	3·4	·75	·72	·857
September...	·829	·719	·110	84·8	91·7	79.5	3·041	8·805	·70	195	354	149	20	·16	3 9	·97	·94	·815
October	·883	·751	·132	83·8	89·8	77·9	4·320	7·874	·76	155	195	278	114	·07	3·0	·69	·62	·863
November...	·949	·841	·108	79·0	84·4	71·9	8·121	5·851	·77	270	32	16	402	·27	4·7	·72	·64	·745
December...	30·054	·943	·111	76·9	82·0	71·8	5·662	6·911	·75	170	1	13	560	·18	4·5	·53	·52	·681

	Mean Monthly indication of the Barometer at the times of Superior Maximum and Minimum pressure corrected to 32°.0 Faht.			Mean Monthly temperature as deduced from the hourly observations, together with the Mean Monthly Maximum and Minimum Temperature.			Depth to which Rain has fallen, and amount of water evaporated from a shallow cistern of water, together with the relative humidity of the Air.			Direction of the wind in each Month, as exhibited by the number of hours during which it has blown from the N.W., S.W., S.E., or N. E.				Mean and extreme pressure of the wind as shown on a square foot of Surface.		Mean per Centage of clouds covering the face of the sky during the day and night in each month.		Mean Monthly Tension of vapour, calculated by the Monthly Means of dry and wet Thermometers at 30 In.
	1			2			3			4				5		6		7
	Maximum. P. M. h. m. 21·41	Minimum. P. M. h. m. 3·41	Difference.	Mean	Maximum.	Minimum.	Rain.	Evaporation.	Quantity of Moisture or Humidity.	N. W.	S.W.	S.E.	N. E.	Mean.	Extreme.	Day.	Night.	Barometer Standard.
1851	Inches	Inches	Inches	°	°	°	Inches	Inches	Cents.	No.	No.	No.	No.	lbs.	lbs.	Cents.	Cents.	Inches.
January....	·084	·971	·113	76·5	82·9	69·4	0	8·283	·73	178	19	51	496	·08	1·3	·31	·14	·654
February ...	·031	·903	·128	77·4	84·9	69·5	0	8·222	·73	81	125	334	132	·06	·7	·20	·15	·675
March......	29·985	·859	·126	82·1	89·8	74·5	0	10·463	·73	124	104	385	131	·13	2·5	·21	·20	·782
April.......	·880	·747	·133	86·7	94·2	79·7	0	12·736	·72	26	184	488	14	·30	3·1	·28	·24	·884
May........	·778	·667	·111	86·5	94·2	80·7	18·603	10·188	·73	70	179	394	97	·56	21·0	·34	·34	·891
June........	·745	·629	·116	89·4	98·5	82·2	1·261	12·477	·61	96	445	168	11	·21	6·2	·55	·60	·825
July.... ...	·733	·626	·107	85·4	93·2	79·6	6·496	8·361	·71	104	484	130	18	·10	10·5	·79	·79	·845
August......	·788	·675	·113	85·2	93·1	79·0	4·338	8·525	·72	60	494	166	21	·12	4·0	·70	·70	·851
September ..	·834	·705	·129	85·8	93·6	79·7	1·700	9·754	·71	108	304	229	78	·08	2·4	·58	·57	·853
October.....	·898	·776	·122	82·9	90·1	77·5	5·629	7·541	·78	108	322	166	148	·11	10·0	·64	·58	·853
November...	·916	·813	·103	79·2	83·5	75·7	24·846	4·880	·85	141	61	169	349	·26	10·0	·63	·54	·826
December...	30·057	·946	·111	77·6	82·8	72·5	1·446	7·420	·73	255	1	0	488	·05	2·0	·49	·43	·677
1852																		
January.....	·049	·928	·121	76·7	83·1	70·4	0	8·170	·74	90	45	104	453	·06	2·0	·48	·19	·669
February....	·036	·913	·123	78·3	85·4	71·1	0	8·141	·74	134	66	147	339	·04	1·3	·36	·20	·701
March......	29·944	·816	·128	82·3	89·3	75·3	2·623	10·005	·75	19	154	554	17	·08	1·6	·34	·14	·807
April......	·900	·774	·126	86·0	93·1	78·6	0	11·379	·71	0	141	572	7	·12	2·0	·39	·19	·863
May........	·797	·687	·110	88·4	97·6	81·6	2·226	12·241	·68	74	269	341	47	·11	10·0	·65	·33	·886
June.......	·765	·651	·114	88·5	97·6	81·8	1·886	10·647	·65	39	359	246	42	·15	5·0	·81	·46	·848

W. S. JACOB, *H. C. Astronomer.*